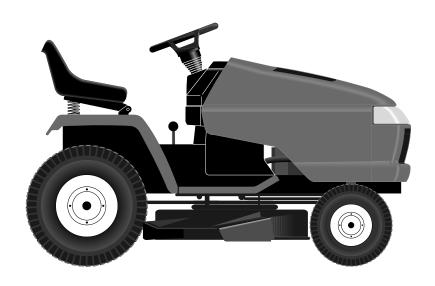
# Poulan PRO



**OWNER'S MANUAL** 

**MODEL:** 

PRGT2046A

**LAWN TRACTOR** 

**WARNING:** 

Read this Owner's Manual and follow all Warnings and Safety Instructions. Failure to do so can result in serious injury.

Always Wear Eye Protection During Operation

177271 Rev. 2 8.24.01 TR Printed in U.S.A.

### **SAFETY RULES**



SAFE OPERATION PRACTICES FOR RIDE-ON MOWERS



**IMPORTANT:** THIS CUTTING MACHINE IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS. FAILURE TO OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

#### I. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing.
   Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mowerrelated injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

#### II. SLOPE OPERATION

Slopes are a major factor related to loss-of-control and tipover accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

#### DO:

- Mow up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.

#### DO NOT:

- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.

#### III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never* assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

#### IV. SERVICE

- Use extra care in handling gasoline and other fuels.
   They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.

#### **SAFETY RULES**

# Safe Operation Practices for Ride-On Mowers













- Check brake operation frequently. Adjust and service as required.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small
- Mow up and down slopes (15° Max), not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.



Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.



CAUTION: In order to prevent accidental starting when setting up, transporting, adjusting or making repairs, always disconnect spark plug wire and place wire where it cannot contact spark



CAUTION: Do not coast down a hill in neutral, you may lose control of the tractor.



**CAUTION:** Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Operate only at the lowest possible speed when on a slope. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.



#### WARNING



Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



#### WARNING



Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

#### PRODUCT SPECIFICATIONS

| GASOLINE CAPACITY<br>AND TYPE: | 3.5 GALLONS<br>UNLEADED REGULAR   |
|--------------------------------|---|
| OIL TYPE (API-SF-SJ):          | SAE 10W-30 (above 32°F)<br>SAE 5W-30 (below 32°F)                       |
| OIL CAPACITY:                  | W/FILTER: 4.0 PINTS<br>W/OFILTER: 3.75 PINTS                            |
| SPARK PLUG:<br>(GAP: .040")    | CHAMPION RC12YC   |
| GROUND SPEED (MPH):            | FORWARD: LO HI  1st 0.8 1.7  2nd 1.4 3.3  3rd 2.3 5.4  REVERSE: 0.9 2.1 |
| TIRE PRESSURE:                 | FRONT: 14 PSI<br>REAR: 10 PSI   |
| CHARGING SYSTEM:               | 16 AMPS @ 3600 RPM  |
| BATTERY:                       | AMP/HR: 30<br>MIN. CCA: 240<br>CASE SIZE: U1R                           |
| BLADE BOLT TORQUE:             | 27–35 FT. LBS.  |

**CONGRATULATIONS** on your purchase of a new tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center/department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tractor properly. Always observe the "SAFETY RULES".

#### **CUSTOMER RESPONSIBILITIES**

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under "Customer Responsibilities" and "Storage" sections of this owner's manual.

**WARNING:** This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

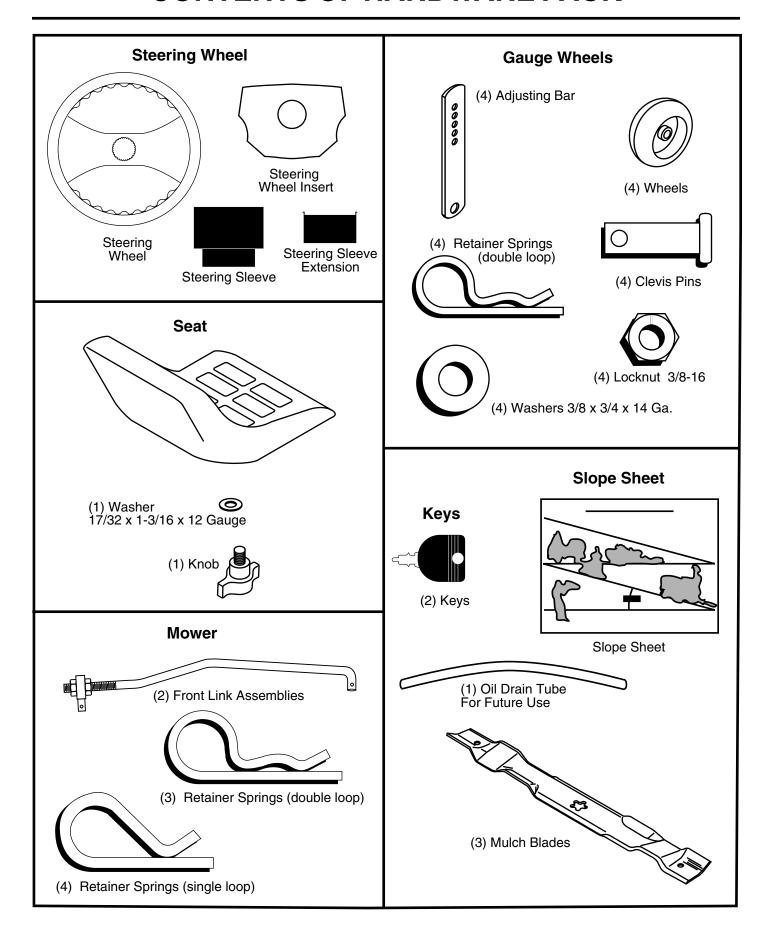
A spark arrester for the muffler is available through your nearest authorized service center/department (See REPAIR PARTS section of this manual).

In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.

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# **CONTENTS OF HARDWARE PACK**



Your new tractor has been assembled at the factory with exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tractor all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to insure proper tightness.

#### TOOLS REQUIRED FOR ASSEMBLY

A socket wrench set will make assembly easier. Standard wrench sizes are listed.

- (1) Tire pressure gauge
- (2) 9/16" wrenches
- (1) Utility knife
- (1) 1/2" wrench (1) 3/4" socket w/drive ratchet When right or left hand is mentioned in this manual, it means when you are in the operating position (seated behind the steering wheel).

### TO REMOVE TRACTOR FROM CARTON UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton.
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Remove mower and packing materials.
- Check for any additional loose parts or cartons and remove.

#### BEFORE REMOVING TRACTOR FROM SKID

#### ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Slide the steering sleeve over the steering shaft.
- Align tabs and press steering sleeve extension into bottom of steering wheel.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto steering wheel adapter.
- Secure steering wheel to steering shaft with hex bolt. lock washer and large flat washer previously removed. Tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

**IMPORTANT: CHECK FOR AND REMOVE ANY STAPLES** IN SKID THAT MAY PUNCTURE TIRES WHERE TRACTOR IS TO ROLL OFF SKID.

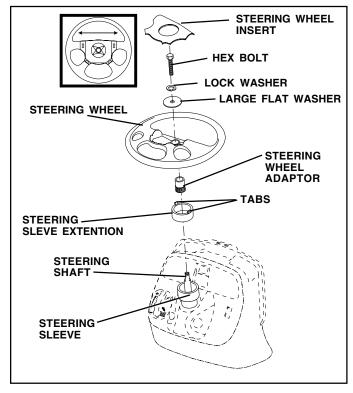


FIG. 1

#### **HOW TO SET UP YOUR TRACTOR**

#### CHECK BATTERY (See Fig. 2)

- Lift hood to raised position.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTÉRY" in Maintenance section of this manual for charging instructions).

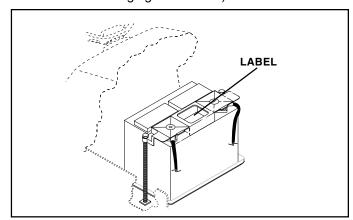


FIG. 2

#### **INSTALL SEAT (See Fig. 3)**

Adjust seat before tightening adjustment knob.

- Remove adjustment knob and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- Pivot seat upward and remove from the cardboard packing. Remove the cardboard packing and discard.
- Place seat on seat pan so head of shoulder bolt is positioned over large slotted hole in pan.
- Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
- Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment knob securely.

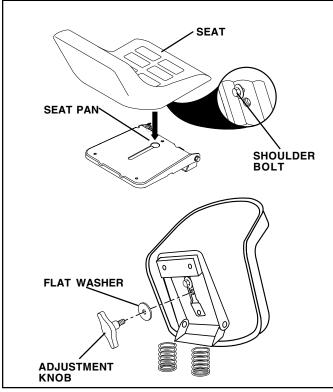


FIG. 3

**NOTE:** You may now roll or drive your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

# TO ROLL TRACTOR OFF SKID (See Operation section, page 12, for location and function of controls)

# REMOVE THE FOLLOWING BULLET FOR MODELS WITH ELECTRIC LIFT.

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in neutral (N) position.
- · Roll tractor forward off skid.

# ADD THE FOLLOWING BULLET FOR MODELS WITH MOWER DECK ATTACHED.

Remove banding holding deflector shield up against tractor.

# TO DRIVE TRACTOR OFF SKID (See Operation section, page 12, for location and function of controls)

**WARNING:** Before starting, read, understand and follow all instructions in the Operation section of this manual. Be sure tractor is in a well-ventilated area. Be sure the area in front of tractor is clear of other people and objects.

- Be sure all the above assembly steps have been completed.
- Check engine oil level and fill fuel tank with gasoline.
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- Place gear shift lever in neutral (N) position.
- Press lift lever plunger and raise attachment lift lever to its highest position.
- Start the engine. After engine has started, move throttle control to idle position.
- Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- Slowly release clutch/brake pedal and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place gearshift lever in neutral position.
- Turn ignition key to "OFF" position.

Continue with the instructions that follow.

# ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 4)

The gauge wheels are designed to keep the mower deck in proper position when operating mower. Be sure they are properly adjusted to ensure optimum mower performance.

- Slide gauge wheel bar down into bracket channel, Be sure that gauge wheel bar aligning holes are on top. Assemble gauge wheels as shown using shoulder bolts, 3/8 washers and 3/8-16 center locknuts and tighten securely.
- For ease of mower to tractor assembly, raise gauge wheels to highest position and retain with clevis pins and spring retainers.
- Adjust gauge wheels before operating mower. See "TO ADJUST GAUGE WHEELS" in the Operation section of this manual.

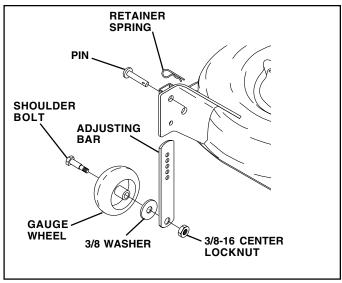


FIG. 4

IMPORTANT: FOR SHIPPING PURPOSES, THE MULCHER PLATE WAS PREATTACHED TO YOUR MOWER. THE MULCHER PLATE MUST ONLY BE USED WITH THE MULCHING BLADES THAT CAME PACKED SEPARATELY IN THE CARTON.

YOUR MOWER CAME FACTORY EQUIPPED WITH HIGH PERFORMANCE BLADES, WHICH ARE THE BEST BLADES FOR BAGGING AND DISCHARGING. TO USE YOUR MOWER WITH THE HIGH PERFORMANCE BLADES THE MULCHER PLATE MUST BE REMOVED FROM THE MOWER (SEE FIG. 5).

# TO SET UP YOUR MOWER FOR MULCHING (See Fig. 5)

- Turn the mower over to allow access to blades.
- Remove hex bolt, lock washer and flat washer and remove high performance blades. Store in safe place.
- Install mulcher blades with trailing edge up towards deck as shown.

**IMPORTANT:** TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL ASSEMBLY.

- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (27-35 Ft. Lbs. torque).

**IMPORTANT**: BLADE BOLT IS GRADE 8 HEAT TREATED.

Install mulcher plate if previously removed.

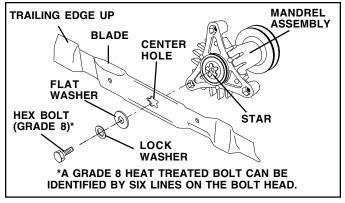


FIG. 5

#### **INSTALL MULCHER PLATE (See Fig. 6)**

**NOTE:** If you installed the mulching blades you will need to install the mulcher plate.

- Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- Hook rear latch into hole on back of mower deck.



CAUTION: Do not remove deflector shield from mower. Raise and hold shield when attaching mulcher plate and allow it to rest on plate while in operation.

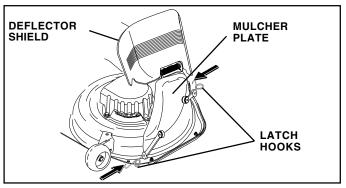


FIG. 6

# TO CONVERT TO BAGGING OR DISCHARGING

**NOTE:** The mulcher blades will discharge and bag grass, but for best bagging and discharging install the high performance blades.

- Remove mulcher plate and mulcher blades and install high performance blades, (see BLADE REMOVAL in the Maintenance section of this manual)
- Store mulcher blades and mulcher plate in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

# INSTALL MOWER AND DRIVE BELT (See Fig. 7)

Be sure tractor is on level surface and mower suspension arms are raised with attachment lift control. Engage parking brake.

- Cut and remove ties securing anti-sway bar and belts.
   Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with deflector sheild to right side of tractor.

**IMPORTANT:** CHECK BELT FOR PROPER ROUTING IN ALL MOWER PULLEY GROOVES. INSTALL BELT INTO ELECTRIC CLUTCH PULLEY GROOVE.

- Install one front link in top hole of the L.H. front mower bracket and L.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Install second front link in R.H. front suspension bracket only and retain with single loop retainer spring as shown.
- Slide right side of mower back and install link in top hole of R.H. front mower bracket. Retain with single loop retainer spring as shown.

- Turn height adjustment knob counterclockwise until it stops.
- Lower mower linkage with attachment lift control.
- Place the suspension arms on inward pointing deck pins. If necessary, rock and raise front of mower to align deck pins with the holes in suspension arms. Retain with double loop retainer spring with loops down as shown.
- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- Turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise deck to highest position.
- Adjust gauge wheels before operating mower as shown in the Operation section of this manual.

#### CHECK TIRE PRESSURE

The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" section of this manual.

#### CHECK MOWER LEVELNESS

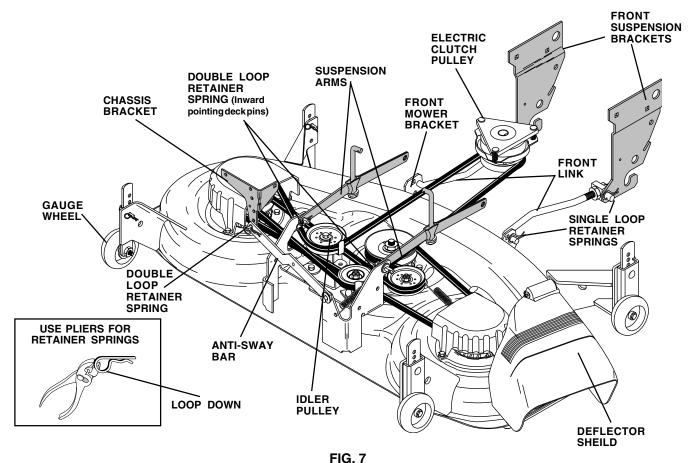
For best cutting results, mower should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

# CHECK FOR PROPER POSITION OF ALL BELTS

See the figures that are shown for replacing motion, mower drive, and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

#### CHECK BRAKE SYSTEM

After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.



#### **✓ CHECKLIST**

BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFACTION FROM THIS QUALITY PRODUCT.

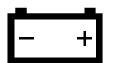
#### PLEASE REVIEW THE FOLLOWING CHECKLIST:

- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- ✓ Be sure mower deck is properly leveled side-to-side/ front-to-rear for best cutting results. (Tires must be properly inflated for leveling).
- ✓ Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- Check wiring. See that all connections are still secure and wires are properly clamped.

WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

- ✓ Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- ✓ Become familiar with all controls their location and function. Operate them before you start the engine.
- ✓ Be sure brake system is in safe operating condition.

These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.



**BATTERY** 



**CAUTION OR WARNING** 



**REVERSE** 



**FORWARD** 



**FAST** 



**SLOW** 



**ENGINE ON** 



**ENGINE OFF** 



**OIL PRESSURE** 



LIGHTS ON



**OVER TEMP** LIGHT



**FUEL** 



**CHOKE** 



MOWER HEIGHT



PARKING BRAKE **LOCKED** 



**UNLOCKED** 



MOWER LIFT



ATTACHMENT **CLUTCH ENGAGED** 



**REVERSE** 



**NEUTRAL** 



HIGH



LOW



**PARKING BRAKE** 





**ATTACHMENT CLUTCH DISENGAGED** 











KEEP AREA CLEAR

SLOPE HAZARDS (SEE SAFETY RULES SECTION)



DANGER, KEEP HANDS AND FEET AWAY



**FREE WHEEL** (Automatic Models only)

# KNOW YOUR TRACTOR READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR TRACTOR.

Compare the illustrations with your tractor to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

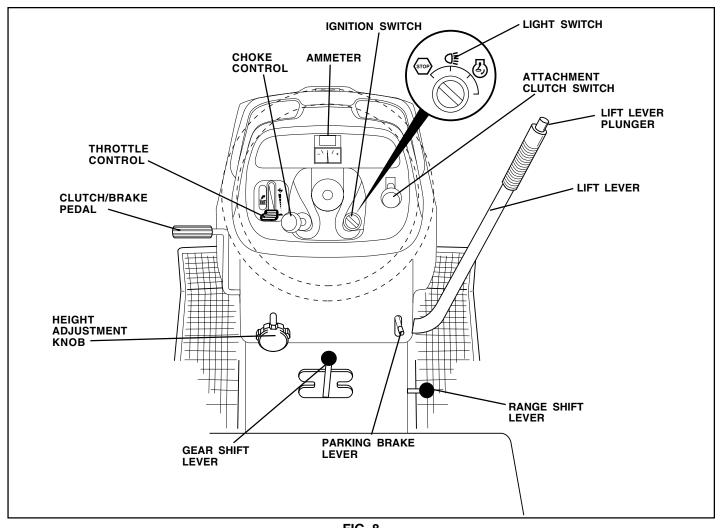


FIG. 8

Our tractors conform to the safety standards of the American National Standards Institute.

**ATTACHMENT CLUTCH SWITCH** - Used to engage mower blades or other attachments mounted to your tractor.

 $\mbox{\bf LIFTLEVER}$  - Used to raise and lower mower deck or other attachments mounted to your tractor.

**LIFT LEVER PLUNGER** - Used to release attachment lift lever when changing its position.

**CLUTCH/BRAKE PEDAL -** Used for declutching and braking the tractor and starting the engine.

**GEAR SHIFT LEVER -** Selects the speed and direction of tractor.

**CHOKE CONTROL** - Used when starting a cold engine.

LIGHT SWITCH - Turns the headlights on and off.

THROTTLE CONTROL - Used to control engine speed.

**IGNITION SWITCH** - Used to start and stop the engine.

**PARKING BRAKE LEVER** - Locks clutch/brake pedal into the brake position.

**HEIGHT ADJUSTMENT KNOB** - Used to adjust the mower height.

**AMMETER** - Indicates charging (+) or discharging (-) of battery.

**RANGE SHIFT LEVER** - Allows high (H) or low (L) speed for all forward and reverse gears.



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety glasses.

#### **HOW TO USE YOUR TRACTOR**

#### TO SET PARKING BRAKE (See Fig. 9)

Your tractor is equipped with an operator presence sensing switch. When engine is running, any attempt by the operator to leave the seat without first setting the parking brake will shut off the engine.

- Depress clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "ENGAGED" position and release pressure from clutch/brake pedal. Pedal should remain in "BRAKE" position. Make sure parking brake will hold tractor secure.

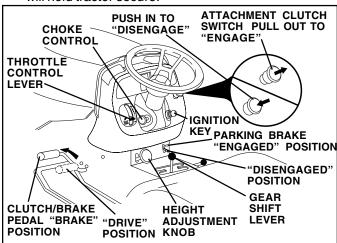


FIG. 9

#### STOPPING (See Fig. 9)

**MOWER BLADES -**

 To stop mower blades, move attachment clutch switch to "DISENGAGED" position.

#### GROUND DRIVE -

- To stop ground drive, depress clutch/brake pedal into full "BRAKE" position.
- Move gearshift lever to neutral (N) position.

#### **ENGINE-**

Move throttle control to slow position.

**NOTE:** Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to "backfire"

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

**IMPORTANT:** LEAVING THE IGNITION SWITCH IN ANY POSITION OTHER THAN "OFF" WILL CAUSE THE BATTERY TO BE DISCHARGED, (DEAD).

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.



TRANSAXLE

CAUTION: Always stop tractor completely, as described above, before leaving the operator's position; to empty grass catcher, etc.

#### TO USE THROTTLE CONTROL (See Fig. 9)

Always operate engine at full throttle.

- Operating engine at less than full throttle reduces the battery charging rate.
- Full throttle offers the best bagging and mower performance

#### TO USE CHOKE CONTROL (See Fig. 9)

Use choke control whenever you are starting a cold engine. Do not use to start a warm engine.

 To engage choke control, pull knob out. Slowly push knob in to disengage.

# TO MOVE FORWARD AND BACKWARD (See Fig. 9)

The direction and speed of movement is controlled by the gearshift lever.

- Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) position.
- Move gearshift and range shift levers to desired position.
- Slowly release clutch/brake pedal to start movement.
   IMPORTANT: BRING TRACTOR TO A COMPLETE STOP BEFORE SHIFTING OR CHANGING GEARS. FAILURE TO DO SO WILL SHORTEN THE USEFUL LIFE OF YOUR

# TO ADJUST MOWER CUTTING HEIGHT (See Fig. 9)

The cutting height is controlled by turning the height adjustment knob in desired direction.

- Turn knob clockwise ( ) to raise cutting height.
- Turn knob counterclockwise () to lower cutting height.

The cutting height range is approximately 1-1/2" to 4-1/2". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

#### TO ADJUST GAUGE WHEELS (See Fig. 10)

Gauge wheels are properly adjusted when they are slightly off the ground when mower is at the desired cutting height in operating position. Gauge wheels then keep the deck in proper position to help prevent scalping in most terrain conditions.

- Be sure tractor is on a flat level surface.
- Lower mower and adjust mower to desired cutting height.

- Remove retainer spring and clevis pin which secure each gauge wheel bar.
- Lower gauge wheels to ground. Raise gauge wheels slightly to align holes in bracket and gauge wheel bar and insert clevis pin. Gauge wheels should be slightly off the ground.
- Replace retainer spring into clevis pin.

**IMPORTANT:** BE SURE TO READJUST GAUGE WHEELS IF YOU CHANGE THE CUTTING HEIGHT OF THE MOWER DECK.

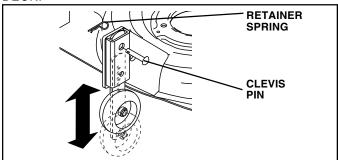


FIG. 10

#### TO OPERATE MOWER (See Fig. 11)

Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine.

- Select desired height of cut.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES disengage attachment clutch control.



CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the deflector shield in place.

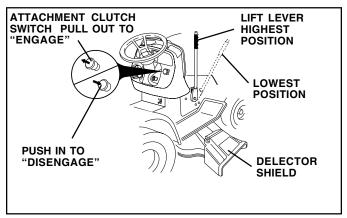


FIG. 11

#### TO OPERATE ON HILLS



CAUTION: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope.

- Choose the slowest speed before starting up or down hills.
- · Avoid stopping or changing speed on hills.

- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move gearshift lever to 1st gear and range shift lever to low (L) position. Be sure you have allowed room for tractor to roll slightly as you restart movement.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

#### TO TRANSPORT

- Raise attachment lift to highest position with attachment lift control.
- When pushing or towing your tractor, be sure gearshift lever is in neutral (N) position.
- Do not push or tow tractor at more than five (5) MPH.

**NOTE**: To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

#### TOWING CARTS AND OTHER ATTACHMENTS

Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.

# BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Customer Responsibilities section of this manual).
- To change engine oil, see the Customer Responsibilities section in this manual.

#### **ADD GASOLINE**

 Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

**IMPORTANT:** WHEN OPERATING IN TEMPERATURES BELOW 32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.



CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

#### TO START ENGINE (See Fig. 9)

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place gear shift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to fast position
- Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

**NOTE:** Before starting, read the warm and cold starting procedures below.

• Insert key into ignition and turn key clockwise to "START" position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, push choke control in, wait a few minutes and try again. If engine still does not start, pull the choke control out and retry.

#### WARM WEATHER STARTING (50° F and above)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

#### COLD WEATHER STARTING (50° F and below)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.
- The attachments can be used during the engine warmup period and may require the choke control be pulled out slightly.

**NOTE:** If at a high altitude (above 3000 feet) or in cold temperatures (below 32 F) the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

#### **MOWING TIPS**

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the tractor. This will result in a more even distribution of clippings and more uniform cutting.

- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 12).
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing
  to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting
  a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

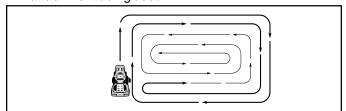
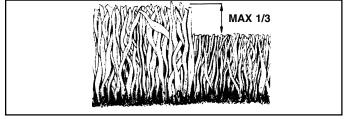


FIG. 12

#### **MULCHING MOWING TIPS**

**IMPORTANT:** FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH. CLEAN AFTER EACH USE.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 13). For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.



15 FIG. 13

| AS  | MAINTENANCE SCHEDUL<br>L IN DATES<br>YOU COMPLETE<br>GULAR SERVICE | .E       | EFORE | EACHUS<br>EVERY 8 | HOURS<br>HOURS | S HOUR<br>S HOUR<br>SVERY S | 3 HOUR<br>OHOUR<br>VERY | S HOUS   | EASON<br>EASON | STORA<br>SER | VICE | E DA | TES |
|-----|--|----------|-------|-------------------|----------------|-----------------------------|-------------------------|----------|----------------|--------------|------|------|-----|
|     | Check Brake Operation  | <b>V</b> | 1     |                   |                |                             |                         |          |                |              |      |      |     |
|     | Check Tire Pressure  | <b>V</b> | 1     |                   |                |                             |                         |          |                |              |      |      |     |
| т   | Check Operator Presence and Interlock Systems                      | ~        |       |                   |                |                             |                         |          |                |              |      |      |     |
| R   | Check for Loose Fasteners  | 1        |       |                   |                | <b>1</b> 7                  |                         | <b>/</b> |                |              |      |      |     |
| AC  | Sharpen/Replace Mower Blades                                       |          |       | <b>√</b> 4        |                |                             |                         |          |                |              |      |      |     |
| Ι¥  | Lubrication Chart  |          |       | <b>/</b>          |                |                             |                         | <b>V</b> |                |              |      |      |     |
| Ö   | Check Battery Level  |          |       | <b>1</b> 6        |                |                             |                         |          |                |              |      |      |     |
| R   | Clean Battery and Terminals  |          |       | <b>/</b>          |                |                             |                         | <b>V</b> |                |              |      |      |     |
|     | Check Transaxle Cooling  |          |       | <b>'</b>          |                |                             |                         |          |                |              |      |      |     |
|     | Adjust Blade Belt(s) Tension                                       |          |       |                   |                | <b>1</b> 5                  |                         |          |                |              |      |      |     |
|     | Adjust Motion Drive Belt(s) Tension                                |          |       |                   |                | <b>1</b> 5                  |                         |          |                |              |      |      |     |
|     | Check Engine Oil Level   | 1        | 1     |                   |                |                             |                         |          |                |              |      |      |     |
|     | Change Engine Oil  |          |       | 1,2,3             |                |                             |                         | <b>/</b> |                |              |      |      |     |
| lε  | Clean Air Filter   |          |       | <b>√</b> 2        |                |                             |                         |          |                |              |      |      |     |
| Ν   | Clean Air Screen   |          |       | <b>√</b> 2        |                |                             |                         |          |                |              |      |      |     |
| Ģ   | Inspect Muffler/Spark Arrester                                     |          |       |                   | <b>/</b>       |                             |                         |          |                |              |      |      |     |
| Ι'n | Replace Oil Filter (If equipped)                                   |          |       |                   |                | 1,2                         |                         |          |                |              |      |      |     |
| ΙË  | Clean Engine Cooling Fins  |          |       |                   |                | <b>√</b> 2                  |                         |          |                |              |      |      |     |
| -   | Replace Spark Plug   |          |       |                   |                | 1                           | 1                       |          |                |              |      |      |     |
|     | Replace Air Filter Paper Cartridge                                 |          |       |                   |                | <b>√</b> 2                  |                         |          |                |              |      |      |     |
|     | Replace Fuel Filter  |          |       |                   |                |                             | /                       |          |                |              |      |      |     |

- 1 Change more often when operating under a heavy load or in high ambient temperatures. 5 If equipped with adjustable system.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 If equipped with oil filter, change oil every 50 hours.
- 4 Replace blades more often when mowing in sandy soil.

- 6 Not required if equipped with maintenance-free battery.
- 7 Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

#### GENERAL RECOMMENDATIONS

The warranty on this tractor does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain tractor as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your tractor.

All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

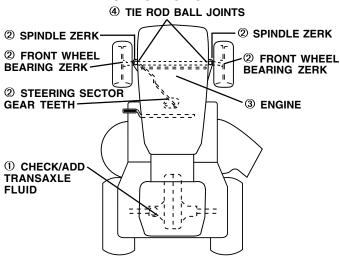
Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **BEFORE EACH USE**

- Check engine oil level.
- Check brake operation.
- Check tire pressure.
- Check operator presence and interlock systems for proper operation.
- Check for loose fasteners.

IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRICANTS WILL ATTRACT DUST AND DIRT THAT WILL SHORTEN THE LIFE OF THE SELF-LUBRICATING BEARINGS. IF YOU FEEL THEY MUST BE LUBRICATED, USE ONLY A DRY, POW-DERED GRAPHITE TYPE LUBRICANT SPARINGLY.

#### **LUBRICATION CHART**



- ① SAE 30 OR 10W30 MOTOR OIL
- **② GENERAL PURPOSE GREASE**
- **③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION**
- **4** SPRAY SILICONE LUBRICANT (MOVE BOOTS TO LUBRI CATE)

#### **TRACTOR**

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted. (See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual).

#### **TIRES**

- Maintain proper air pressure in all tires (See "PRODUCT SPECIFICATIONS" section of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

#### **OPERATOR PRESENCE SYSTEM**

Be sure operator presence and interlock systems are working properly. If your tractor does not function as described, repair the problem immediately.

- The engine should not start unless the clutch/brake pedal is fully depressed and attachement clutch control is in the disengaged position.
- When the engine is running, any attempt by the operator to leave the seat without first setting the parking brake should shut off the engine.
- When the engine is running and the attachment clutch is engaged, any attempt by the operator to leave the seat should shut off the engine.
- The attachment clutch should never operate unless the operator is in the seat.

#### **BLADE CARE**

For best results mower blades must be kept sharp. Replace bent or damaged blades.

#### **BLADE REMOVAL (See Fig. 14)**

- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade
- Install new or resharpened blade with trailing edge up towards deck as shown.

**IMPORTANT:** TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL ASSEMBLY.

- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (27-35 Ft. Lbs. torque).

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

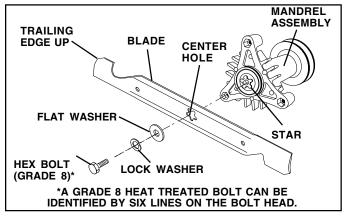


FIG. 14

#### TO SHARPEN BLADE (See Fig. 15)

**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer).

**NOTE:** Do not use a nail for balancing blade. The lobes of the center hole may appear to be centered, but are not.

 Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

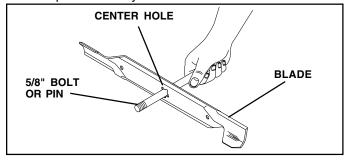


FIG. 15

#### **BATTERY**

Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- · Keep battery and terminals clean.
- · Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.

**NOTE:** The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

#### TO CLEAN BATTERY AND TERMINALS

Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- Remove terminal guard.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "REPLACING BATTERY" in the SERVICE AND ADJUSTMENTS section of this manual).

#### V-BELTS

Check V-belts for deterioration and wear after 100 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

#### TRANSAXLE COOLING

Keep transaxle free from build-up of dirt and chaff which can restrict cooling.

# CHECK TRANSAXLE OIL LEVEL (See Fig. 16)

- Block up rear axle securely.
- Remove left rear wheel by removing hub bolts.
- Remove filler plug from transaxle. Oil level must be even with plug threads. If necessary, fill with SAE 30 motor oil, API SF-SJ. Replace filler plug.
- Reassemble wheel to hub.

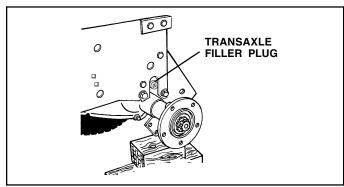
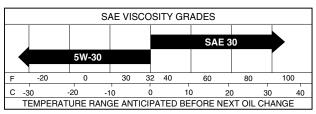


FIG. 16

#### **ENGINE**

#### **LUBRICATION**

Only use high quality detergent oil rated with API service classification SF-SJ. Select the oil's SAE viscosity grade according to your expected operating temperature.



Change the oil after every 50 hours of operation or at least once a year if the tractor is not used for 50 hours in one year.

Check the crankcase oil level before starting the engine and after each eight (8) hours of operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

#### TO CHANGE ENGINE OIL (See Fig. 17)

Determine temperature range expected before oil change. All oil must meet API service classification SF-SJ.

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- · Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- Remove cap from bottom fitting of drain valve and install the drain tube onto the fitting.
- Unlock drain valve by pushing inward and turning counterclockwise.
- To open, pull out on the drain valve.
- After oil has drained completely, close and lock the drain valve by pushing inward and turning clockwise until the pin is in the locked position as shown.
- Remove the drain tube and replace the cap onto to the bottom fitting of the drain valve.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.

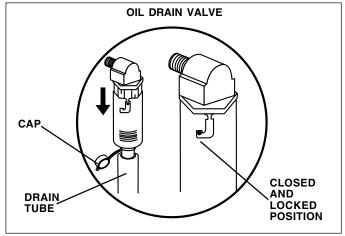


FIG. 17

#### **CLEAN AIR SCREEN**

Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

#### CLEAN AIR INTAKE/COOLING AREAS

To insure proper cooling, make sure the grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled.

**NOTE:** Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

#### AIR FILTER (See Fig. 18)

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first.

Service air cleaner more often under dusty conditions.

Remove knobs and cover.

#### TO SERVICE PRE-CLEANER

- Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.
- If very dirty or damaged, replace pre-cleaner.

#### TO SERVICE CARTRIDGE

- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- Reinstall precleaner cartridge, cover and secure with knobs.

IMPORTANT: PETROLEUM SOLVENTS, SUCH AS KEROSENE, ARE NOT TO BE USED TO CLEAN THE CARTRIDGE. THEY MAY CAUSE DETERIORATION OF THE CARTRIDGE. DO NOT OIL CARTRIDGE. DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.

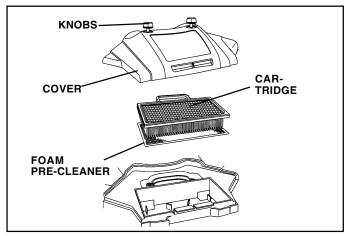


FIG. 18

#### **ENGINE OIL FILTER**

Replace the engine oil filter every season or every other oil change if the tractor is used more than 100 hours in one year.

#### **MUFFLER**

Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage.

#### SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" section of this manual.

#### IN-LINE FUEL FILTER (See Fig. 19)

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- With engine cool, remove filter and plug fuel line sections
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

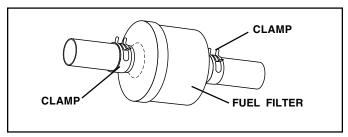


FIG. 19

#### **CLEANING**

- Clean engine, battery, seat, finish, etc. of all foreign matter
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- Protect painted surfaces with automotive type wax.

We do not recommend using a garden hose to clean your tractor unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in a shortened engine life.

#### CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

- A
- Depress clutch/brake pedal fully and set parking brake.
- Place motion control lever in neutral (N) position.
- Place attachment clutch in "DISENGAGED" position.
- Turn ignition key "OFF" and remove key.
- Make sure the blades and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

#### **TRACTOR**

#### TO REMOVE MOWER (See Fig. 20)

- Place attachment clutch in "DISENGAGED" position.
- Turn height adjustment knob to lowest setting.
- Lower mower to its lowest position.
- Remove retainer spring holding anti-swaybar to chassis bracket and disengage anti-swaybar from bracket.
- Remove retainer springs from suspension arms at deck and disengage arms from deck.
- Raise attachment lift to its highest position.
- Remove two retainer springs from each front link and remove links.
- Slide mower forward and remove belt from electric clutch pulley.
- Slide mower out from under right side of tractor.

**IMPORTANT:** IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, REMOVE THE FRONT LINKS.

#### TO INSTALL MOWER

Follow procedure described in "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual.

#### TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

#### SIDE-TO-SIDE ADJUSTMENT (See Figs. 20 and 21)

- Raise mower to its highest position.
- Measure height from bottom edge of mower to ground level at front corners of mower. Distance "A" on both sides of mower should be the same.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.
- To lower one side of mower, loosen lift link adjustment nut on that side.

**NOTE**: Each full turn of adjustment nut will change mower height about 3/16".

Recheck measurements after adjusting.

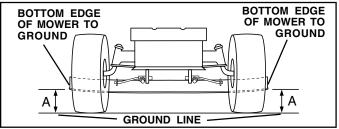
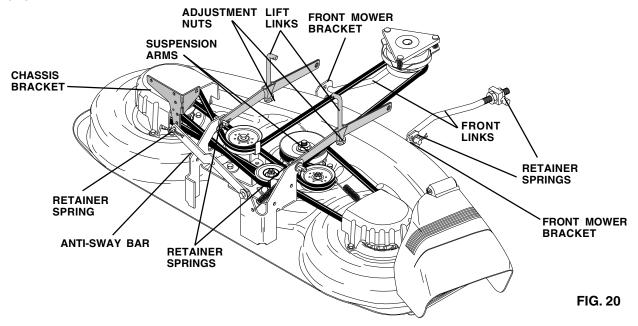


FIG. 21

FRONT-TO-BACK ADJUSTMENT (See Figs. 22 and 23) - IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.



To obtain the best cutting results, the mower housing should be adjusted so the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "F" directly in front of and behind the mandrel at bottom edge of mower housing as shown.

- Before making any necessary adjustments, check that both front links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower housing, loosen nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.
- To raise front of mower housing, loosen nut "H" from trunnion on both front links. Tighten nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.

**NOTE:** Each full turn of nut "G" will change dim. "F" by approximately 3/8".

Recheck side-to-side adjustment.

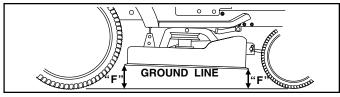


FIG. 22

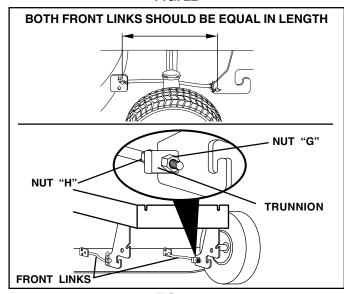


FIG. 23

#### TO REPLACE MOWER DRIVE BELT

MOWER DRIVE BELT REMOVAL (See Fig. 24) -

- Park tractor on a level surface. Engage parking brake.
- Remove screws from L.H. mandrel cover and remove cover
- Roll belt over the top of L.H. mandrel pulley.
- Remove belt from electric clutch pulley.
- Remove belt from idler pulleys.

- Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- Check primary idler arm and two idlers to see that they rotate freely.
- Be sure spring is securely hooked to primary idler arm and bolt in mower housing.

#### MOWER DRIVE BELT INSTALLATION (See Fig. 24) -

- Install belt in both idlers. Make sure belt is in both belt keepers at the idlers as shown.
- Install new belt onto electric clutch pulley.
- Roll belt into upper groove of L.H. mandrel pulley.
- Carefully check belt routing making sure belt is in the grooves correctly and inside belt keepers.
- Reassemble L.H. mandrel cover.

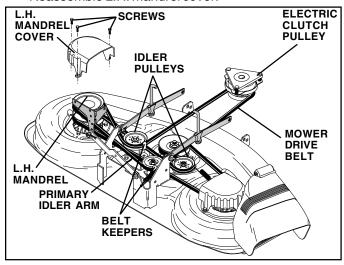


FIG. 24

# TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 25)

Park the tractor on level surface. Engage parking brake.

- Remove mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- Remove mower (See "TO REMOVE MOWER" in this section of this manual).
- Remove screws from R.H. mandrel cover and remove cover. Unhook spring from bolt on mower housing.
- Carefully roll belt off R.H. mandrel pulley.
- Remove belt from center mandrel pulley, idler pulley, and L.H. mandrel pulley.
- Remove any dirt or grass which may have accumulated around mandrels and entire upper deck surface.
- Check secondary idler arm and idler to see that they rotate freely.
- Be sure spring is hooked in secondary idler arm and sway-bar bracket.
- Install new belt in lower groove of L.H. mandrel pulley, idler pulley, and center mandrel pulley as shown.
- Roll belt over R.H. mandrel pulley. Make sure belt is in all grooves properly.
- Reconnect spring to bolt in mower housing and reinstall R.H. mandrel cover.

- Reinstall mower to tractor (See "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual).
- Reassemble mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).

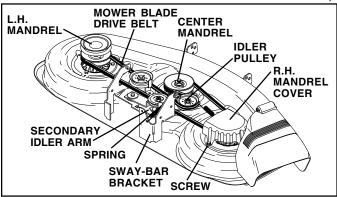


FIG. 25

# TO ADJUST ATTACHMENT CLUTCH (See Fig. 26)

The electric clutch should provide years of service. The clutch has a built-in brake that stops the pulley within 5 seconds. Eventually, the internal brake will wear which may cause the mower blades to not engage, or, to not stop as required. Adjustments should be made by your nearest authorized service center/department.

- Make sure attachment clutch and ignition switches are in "OFF" position.
- Adjust the three nylon locknuts until space between clutch plate and rotor measures .012" at all three slot locations cut in side of brake plate.

**NOTE:** After installing a new electric clutch, run tractor at full throttle and engage and disengage electric clutch 10 cycles to wear in clutch plate.

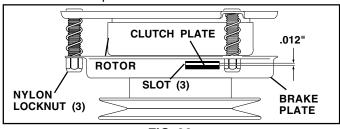


FIG. 26

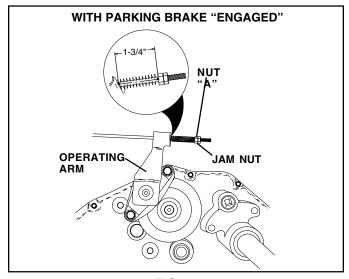
### TO ADJUST BRAKE (See Fig. 27)

Your tractor is equipped with an adjustable brake system which is mounted on the left side of the transaxle.

If tractor requires more than six (6) feet stopping distance at high speed in highest gear on a level dry concrete or paved surface, then brake must be adjusted.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-3/4", loosen jam nut and turn nut "A" until distance becomes 1-3/4". Retighten jam nut against nut "A".

 Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.



**FIG. 27** 

# TO REPLACE MOTION DRIVE BELT (See Fig. 28)

Park the tractor on level surface. Engage parking brake. For ease of service there is a belt installation guide decal on bottom of left footrest. It is not necessary to remove mower. BELT REMOVAL -

- Engage parking brake (creates slack in belt).
- Remove mower drive belt from electric clutch pulley only (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- Roll motion drive belt off transaxle pulley.
- Roll belt off clutching idler pulleys, then off engine pulley and front V-idler pulley.
- Pull belt out of all belt keepers.

#### **BELT INSTALLATION -**

- Place V part of belt into grooves on engine pulley and front V-idler, making sure to route belt inside of belt keepers.
- Put belt coming from V-idler above midspan belt keeper, then onto clutching idler pulleys as shown.
- Make sure V part of belt engages V-idler.
- Place belt around transaxle pulley, beginning at top.
   V part of belt should engage transaxle pulley.
- Place long lower section of belt through loop in midspan belt keeper.
- Check to be sure belt is on proper side of all belt keepers.
- Reinstall mower drive belt onto electric clutch pulley.

IMPORTANT: CHECK BRAKE ADJUSTMENT.

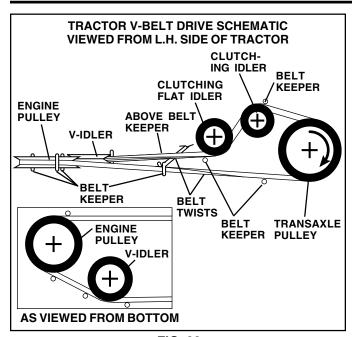


FIG. 28

#### TO ADJUST STEERING WHEEL ALIGNMENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble per instructions in the Assembly section of this manual.

#### FRONT WHEEL TOE-IN ADJUSTMENT

Front wheel toe-in is required for proper steering operation. Toe-in was set at the factory and adjustment should not be necessary. If parts in the front axle or steering mechanism have been replaced or damaged, check toe-in and adjust if necessary.

#### TO CHECK TOE-IN (See Fig. 29) -

- · Position front wheels straight ahead.
- Measure distance between wheels at front and rear of tires (dimensions "A" and "B").
- Front dimension "A" should be 1/8" to 1/4" less than rear dimension "B".

#### TO ADJUST TOE-IN (See Figs. 29 and 30) -

- Loosen jam nuts at adjustment sleeves on tie rod.
- Adjust tie rod until dimension "A" is 1/8" to 1/4" less than dimension "B".
- Tighten jam nuts securely.

#### FRONT WHEEL CAMBER

The front wheel camber is not adjustable on your tractor. If damage has occurred to affect the front wheel camber, contact your nearest authorized service center/department.

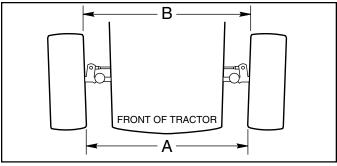


FIG. 29

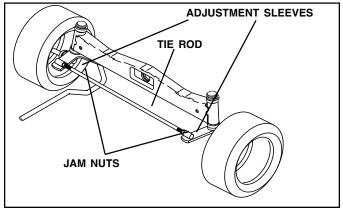


FIG. 30

#### TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 31)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal.
- Repair tire and reassemble.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

#### **REAR WHEEL-**

- Block rear axle securely.
- Remove five (5) hub bolts to allow wheel removal.
- Repair tire and reassemble. Replace and tighten hub bolts securely.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

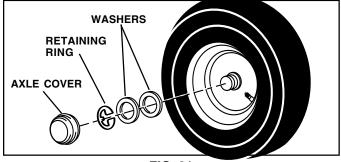


FIG. 31

# TO START ENGINE WITH A WEAK BATTERY (See Fig. 32)



CAUTION: Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged. (See "BATTERY" in the CUSTOMER RESPON-SIBILITIES section of this manual).

If "jumper cables" are used for emergency starting, follow this procedure:

IMPORTANT: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

#### TO ATTACH JUMPER CABLES -

- Connect each end of the RED cable to the POSITIVE (+) terminal of each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to good CHASSIS GROUND, away from fuel tank and battery.

#### TO REMOVE CABLES. REVERSE ORDER -

- BLACK cable first from chassis and then from the fully charged battery.
- · RED cable last from both batteries.

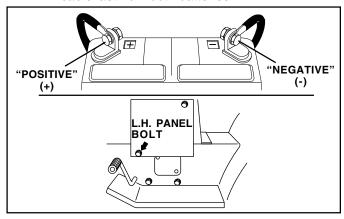


FIG. 32

#### REPLACING BATTERY (See Fig. 33)



CAUTION: Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands,rings,etc.

Positive terminal must be connected first to prevent sparking from accidental grounding.

- Lift hood to raised position.
- Remove terminal guard.
- Disconnect BLACK battery cable then RED battery cable and carefully remove battery from tractor.

- Install new battery with terminals in same position as old battery.
- Reinstall terminal guard.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely
- Close terminal access doors.
- · Close hood.

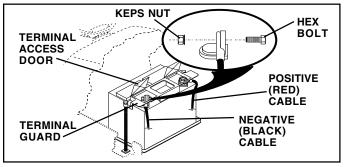


FIG. 33

#### TO REPLACE HEADLIGHT BULB

- Raise hood.
- Pull bulb holder out of the hole in the backside of the grill.
- Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- Close hood.

#### INTERLOCKS AND RELAYS

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### TO REPLACE FUSE

Replace with 30 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

# TO ADJUST ATTACHMENT LIFT SPRING (See Fig. 34)

- While holding spring bushing with wrench, loosen jam nut
- Turn adjustment bolt clockwise to extend spring and reduce lift effort for heavier attachments.
- Turn adjustment bolt counterclockwise for lighter attachments
- Retighten jam nut against spring bushing.

IMPORTANT: DO NOT ADJUST FOR MAXIMUM SPRING TENSION WHEN USING LIGHT ATTACHMENTS SUCH AS A MOWER. ADJUST LIFT LEVER SPRING TO AID IN LIFTING ATTACHMENT. DO NOT OVERPOWER SPRING. WHEN REMOVING ATTACHMENT, ALWAYS ADJUST SPRING TENSION TO ITS LOWEST POSITION.

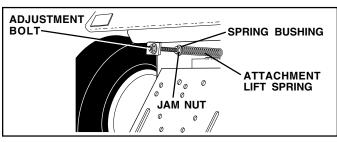


FIG. 34

# TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 35)

- Raise hood.
- Unsnap headlight wire connector.
- Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- To replace, reverse above procedure.

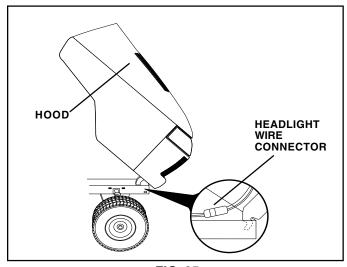


FIG. 35

#### **ENGINE**

# TO ADJUST THROTTLE CONTROL CABLE (See Fig. 36)

The throttle control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- With engine not running, move throttle control lever to fast position.
- Check that swivel is against stop. If it is not, loosen cable clamp screw and pull cable back until swivel is against stop. Tighten cable clamp screw securely.

#### TO ADJUST CHOKE CONTROL (See Fig. 37)

The choke control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- With engine not running, move choke control (located on dash panel) to full choke position.
- Loosen knob and remove cover assembly from air cleaner.

- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- Replace air cleaner cover assembly and tighten knob.

#### TO ADJUST CARBURETOR

Your carburetor is not adjustable. If your engine does not operate properly due to suspected carburetor problems, take your tractor to an authorized service center for repair and/or adjustment.

High speed stop is factory adjusted. Do not adjust - damage may result.

IMPORTANT: NEVER TAMPER WITH THE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED. OVERSPEEDING THE ENGINE ABOVE THE FACTORY HIGH SPEED SETTING CAN BE DANGEROUS. IF YOU THINK THE ENGINE-GOVERNED HIGH SPEED NEEDS ADJUSTING, CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

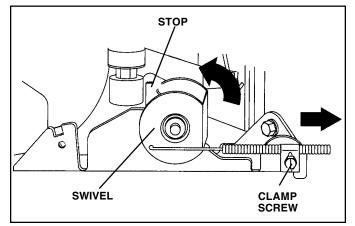


FIG. 36

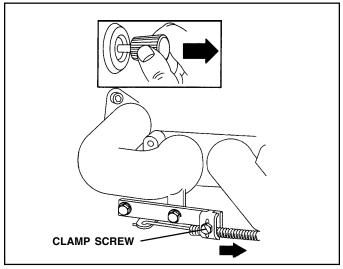


FIG. 37

### **STORAGE**

Immediately prepare your tractor for storage at the end of the season or if the tractor will not be used for 30 days or more.



CAUTION: Never store the tractor with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

#### **TRACTOR**

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire tractor (See "CLEANING" in the Customer Responsibilities section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- Lubricate as shown in the Customer Responsibilities section of this manual.
- Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

#### **BATTERY**

- Fully charge the battery for storage.
- After a period of time in storage, battery may require recharging.
- To help prevent corrosion and power leakage during long periods of storage, battery cables should be disconnected and battery cleaned thoroughly (see "TO CLEAN BATTERY AND TERMINALS" in the Customer Responsibilities section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

#### **ENGINE**

#### **FUEL SYSTEM**

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

- · Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

**NOTE:** Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

#### **ENGINE OIL**

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Customer Responsibilities section of this manual).

#### CYLINDER(S)

- Remove spark plug(s).
- Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- Turn ignition key to "START" position for a few seconds to distribute oil.
- Replace with new spark plug(s).

#### OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust.
   Rust and/or dirt in your gasoline will cause problems.
- If possible, store your tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your tractor to rust.

**IMPORTANT**: NEVER COVER TRACTOR WHILE ENGINE AND EXHAUST AREAS ARE STILL WARM.

# TROUBLESHOOTING POINTS

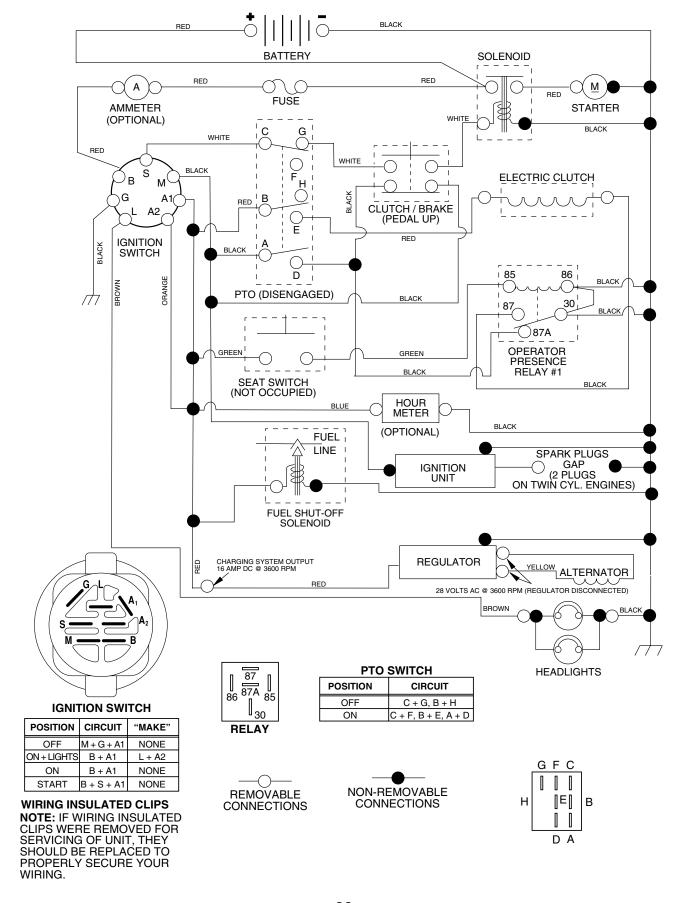
| PROBLEM                          | CAUSE  | CORRECTION  |
|----------------------------------|--|---|
| Will not start                   | <ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol>  | <ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>   |
| Hard to start                    | <ol> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol> 8. Engine valves out of adjustment.   | <ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>  |
| Engine will not turn over        | <ol> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter.</li> <li>Faulty operator presence switch(es).</li> </ol>  | <ol> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center/department.</li> </ol>   |
| Engine clicks but will not start | Weak or dead battery.     Corroded battery terminals.     Loose or damaged wiring.     Faulty solenoid or starter.   | Recharge or replace battery.     Clean battery terminals.     Check all wiring.     Check/replace solenoid or starter.  |
| Loss of power                    | <ol> <li>Cutting too much grass/too fast.</li> <li>Throttle in "CHOKE" position.</li> <li>Build-up of grass, leaves and trash under mower.</li> <li>Dirty air filter.</li> <li>Low oil level/dirty oil.</li> <li>Faulty spark plug.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty engine air screen/fins.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol> | <ol> <li>Set in "Higher Cut" position/reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol> |
| Excessive vibration              | Worn, bent or loose blade.     Bent blade mandrel.     Loose/damaged part(s).  | Replace blade. Tighten blade bolt.     Replace blade mandrel.     Tighten loose part(s). Replace damaged parts.   |

# **TROUBLESHOOTING POINTS**

| PROBLEM  | CAUSE   | CORRECTION   |  |  |  |
|--|---|--|--|--|--|
| Engine continues to run when operator leaves seat with attachment clutch engaged | Faulty operator-safety presence control system.   | Check wiring, switches and connections. If not corrected, contact an authorized service center/department.   |  |  |  |
| Poor cut - uneven  | <ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves, and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>   | <ol> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> <li>Replace blade mandrel.</li> <li>Clean around mandrels to open vent holes.</li> </ol>  |  |  |  |
| Mower blades will not rotate   | <ol> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ol>   | <ol> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ol>  |  |  |  |
| Poor grass discharge   | <ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol> | <ol> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive belt.</li> <li>Reinstall blades sharp edge down.</li> <li>Replace with blades listed in this manual.</li> <li>Clean around mandrels to open vent holes.</li> </ol> |  |  |  |
| Headlight(s) not working (if so equipped)  | <ol> <li>Switch is "OFF".</li> <li>Bulb(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ol>  | <ol> <li>Turn switch "ON".</li> <li>Replace bulb(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>   |  |  |  |
| Battery will not charge  | <ol> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ol>   | <ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>  |  |  |  |
| Engine "backfires" when turning engine "OFF"                                     | Engine throttle control not set at "SLOW"     position for 30 seconds before stopping engine.   | Move throttle control to "SLOW" position and allow<br>to idle for 30 seconds before stopping engine.   |  |  |  |

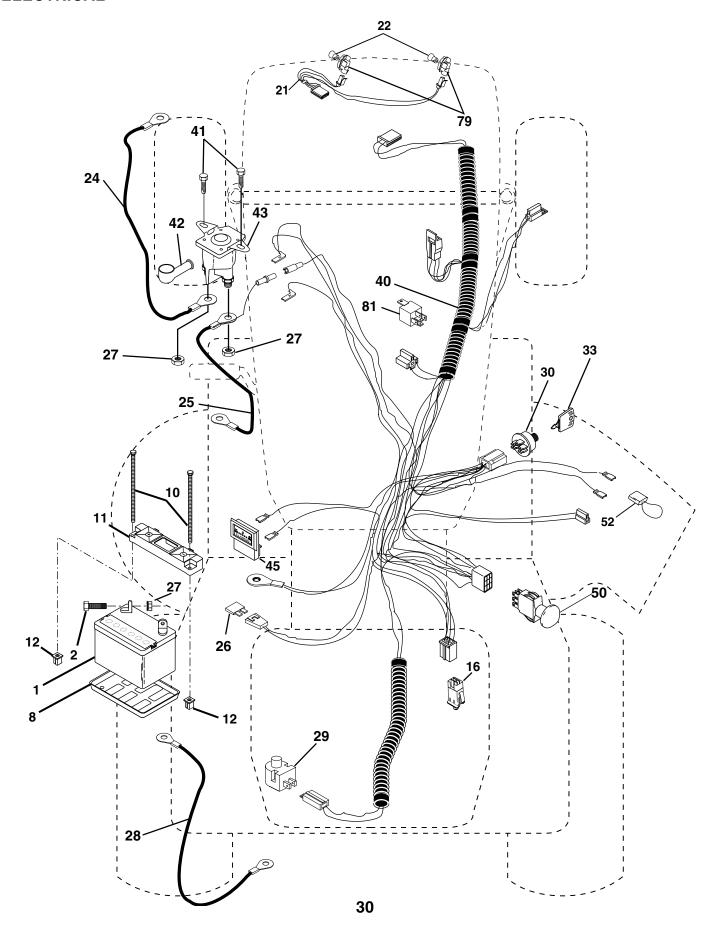
#### TRACTOR - - MODEL NUMBER PRGT2046A

#### **SCHEMATIC**



### **TRACTOR - - MODEL NUMBER PRGT2046A**

#### **ELECTRICAL**



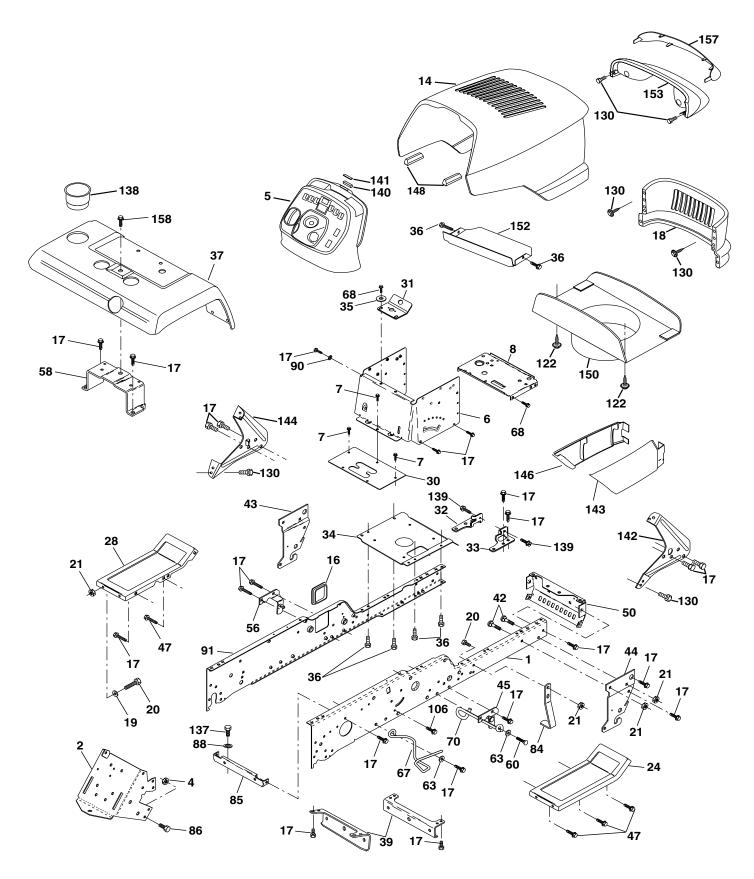
### TRACTOR - - MODEL NUMBER PRGT2046A

#### **ELECTRICAL**

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                    |
|------------|-------------|--------------------------------|
| 1          | 144926      | Battery                        |
| 2          | 74760412    | Bolt Hex Head 1/4-20 x 3/4     |
| 8          | 7603J       | Tray, Battery                  |
| 10         | 145211      | Bolf Btr Frt 1/4-20 X 7.5 zinc |
| 11         | 150109      | Holdown Battery Front Mount    |
| 12         | 145769      | Nut Push Nylon 1/4"            |
| 16         | 153664      | Switch Interlock Push-In       |
| 21         | 166184      | Harness Headlight              |
| 22         |             | Bulb Light                     |
| 24         | 4206J       | Cable, Battery                 |
| 25         | 146149      | Cable, Battery                 |
| 26         |             | Fuse                           |
| 27         | 73510400    | Nut Keps Hex 1/4-20 Unc        |
| 28         | 170697      | Cable, Ground                  |
| 29         | 160784      | Switch, Plunger                |
| 30         | 175566      | Switch, Ign                    |
| 33         | 140401      | Key                            |
| 40         | 170238      | Harness, Ignition              |
| 41         | 17720408    | Screw 1/4-20 x 1/2             |
| 42         | 131563      | Cover, Terminal Red            |
| 43         | 175141      | Solenoid                       |
| 45         | 122822X     | Ammeter                        |
| 50         | 174653      | Switch, PTO                    |
| 52         | 141940      | Protection Wire Loop           |
| 79         | 163996      | Bulbholder                     |
| 81         | 109748X     | Relay Asm.                     |

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

# TRACTOR - - MODEL NUMBER PRGT2046A CHASSIS AND ENCLOSURES

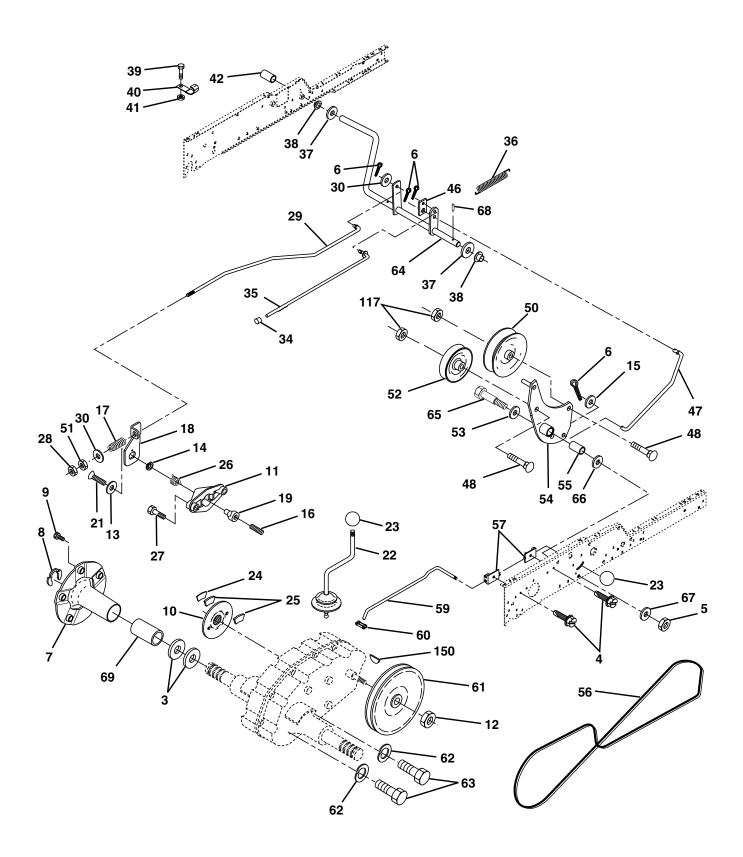


# TRACTOR - - MODEL NUMBER PRGT2046A CHASSIS AND ENCLOSURES

| KEY<br>NO. | PART<br>NO.          | DESCRIPTION                              | KEY<br>NO. | PART<br>NO.      | DESCRIPTION                                     |
|------------|----------------------|--|------------|------------------|---|
| 1          | 175465               | Rail, Frame RH                           | 50         | 175476           | Bracket, Chassis Front                          |
| 2          | 140506               | Drawbar, Gt                              | 56         | 154914           | Bracket Asm., Susp Chassis Lh                   |
| 4          | 73680700             | Nut, Crownlock 7/16-14Unc                | 58         | 175315           | Bracket Asm., Fender                            |
| 5          | 163976X428           | Dash Assa Lawar                          | 60         | 17060620         | Screw Thdrol 3/8-16 x 1-1/4                     |
| 6<br>7     | 157882               | Dash Asm., Lower                         | 63         | 19131614         | Washer 13/32 x 1 x 14 Ga.                       |
|            | 17720408             | Screw, Thd Cut 1/4-20 x 1/2              | 67         | 156973           | Guide Belt Gear Dr.                             |
| 8          | 145166               | Support, Battery                         | 68         | 17490508         | Screw, Thd 5/16-18 x 1/2                        |
| 14<br>15   | 175259X428<br>160568 | Hood Asm., Pnt                           | 70<br>84   | 137159<br>142992 | Guide, Belt Mid Span<br>Stop, Over Center Mower |
| 16         | 121794X              | Lens, Asm Headlight bar<br>Cover, Access | 85         | 144911           | Bracket Support Transaxle                       |
| 17         | 17060612             | Screw, 3/8-16 x 3/4                      | 86         | 74760716         | Bolt, Fin Hex 7/16-14 Unc x 1                   |
| 18         | 175289               | Grille                                   | 88         | 10040700         | Washer Lock Hvy HLCL Spr. 7/16                  |
| 19         | 19131312             | Washer 13/32 x 13/16 x 12 Ga.            | 90         | 11050600         | Washer, Lock External Tooth 3/8                 |
| 20         | 74760616             | Bolt, Fin Hex 3/8-16 x 1                 | 91         | 175464           | Rail, Frame Lh                                  |
| 21         | 73680600             | Nut, Crownlock 3/8-16 Unc                | 106        | 138776           | Bolt 5/16-18 Type TT                            |
| 23         | 17060616             | Screw 3/8-16 x 1                         | 122        | 161464           | Screw Hex Wshd 8-18 x 7/8                       |
| 24         | 145243X428           | Footrest, RH                             | 130        | 164863           | Screw HWHD Hi-Lo #13-16 x 3/4                   |
| 28         | 145244X428           | Footrest, LH                             | 137        | 74780616         | Bolt Fin Hex 7/16-14 x 1 Gr. 5                  |
| 30         | 145051X014           | Saddle                                   | 138        | 163975X428       |   |
| 31         | 161419               | Bracket, Supt 1-pc VGT Steering          | 139        | 171873           | Bolt Shoulder 5/16-18 TT                        |
| 32         | 161327               | Bracket, Pivot Chassis LH                | 140        | 163806           | Magnet YTGT                                     |
| 33         | 161326               | Bracket, Pivot Chassis RH                | 141        | 163805           | Stricker Plate YTGT                             |
| 34         | 177018               | Plate Asm Engine Chassis                 | 142        | 161897           | Bracket Dash RH                                 |
| 35         | 19111116             | Washer 11/32 x 11/16 x 16 Ga.            | 143        | 169847X428       | Grille Skirt RH                                 |
| 36         | 17060512             | Screw 5/16-18 x 3/4                      | 144        | 161900           | Bracket Dash LH                                 |
| 37         | 167286X428           | Fender, Pnt.                             | 146        | 169848X428       | Grille Skirt LH                                 |
| 39         | 175278               | Bracket, Axle Front                      | 148        | 164655           | Extrusion Bumper                                |
| 42         | 72140608             | Bolt, Carriage 3/8-16 x 1                | 150        | 161237           | Duct Heat Hood                                  |
| 43         | 136939               | Bracket, Spnsn Front Lh                  |            |                  |   |
| 44         | 136940               | Bracket, Spnsn Front Rh                  | NOT        | F. All compon    | ent dimensions given in U.S. inches             |
| 45         | 154913               | Bracket Asm., Susp Chassis Rh            | 11011      | 1 inch = 25      | 5 4 mm  |
| 47         | 17670608             | Screw Thdrol 3/8-16 x 1/2 TYT            |            | 1 111011 - 20    |   |

#### TRACTOR - - MODEL NUMBER PRGT2046A

#### **GROUND DRIVE**



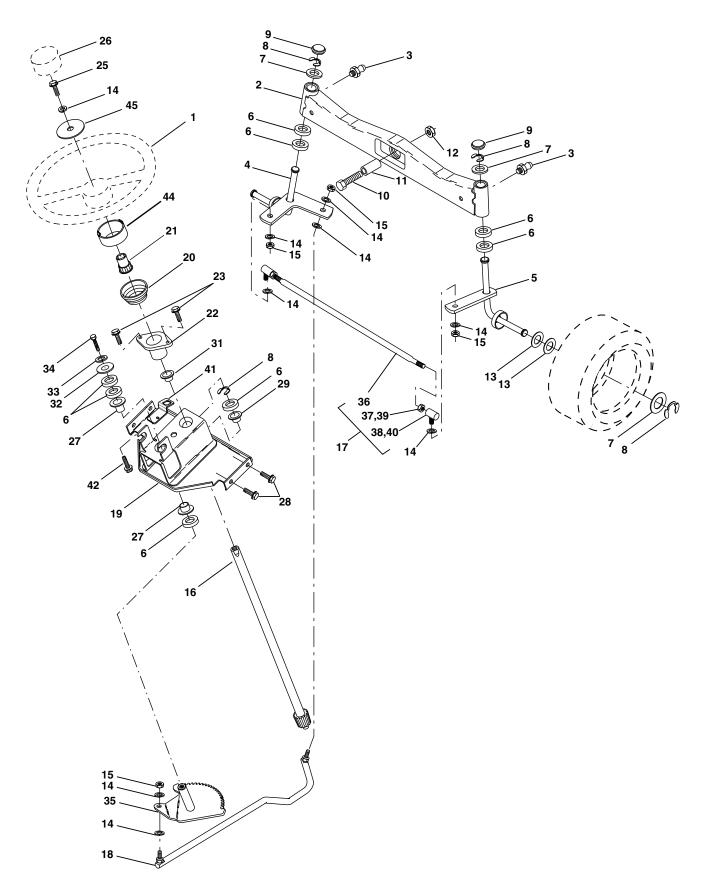
### TRACTOR - - MODEL NUMBER PRGT2046A

#### **GROUND DRIVE**

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                   | KEY<br>NO. | PART<br>NO.            | DESCRIPTION                          |
|------------|-------------|-------------------------------|------------|------------------------|--------------------------------------|
| 1          | 9858M1      | Key, Woodruff                 | 37         | 121749X                | Washer 25/32 x 1-1/4 x 16 Ga.        |
| 3          | 7563R       | Washer, Thrust, Axle          | 38         | 150035                 | Nyliner                              |
| 4          | 17490508    | Screw Thdrol 5/16-18 x 3/4    | 39         | 74321016               | Screw, Fin. #10-24 x 1               |
| 5          | 73680600    | Nut, Crownlock 3/8-16         | 40         | 5304J                  | Actuator, Interlock Switch           |
| 6          | 76020412    | Pin, Cotter                   | 41         | 73931000               | Nut Centerlock 10-24-Umc             |
| 7          | 149176      | Wheel, Hub Assembly           | 42         | 8883R                  | Cover, Pedal                         |
| 8          | 12000034    | Klip, Ring                    | 46         | 145170                 | Retainer, Spring                     |
| 9          | 140080      | Bolt, Hub                     | 47         | 138228                 | Clutch Rod                           |
| 10         | 142509      | Disc, Brake                   | 48         | 72110612               | Bolt, Carriage 3/8-16 x 1-1/2 Gr. 5  |
| 11         | 136927      | Yoke, Brake Disc              | 50         | 131494                 | Pulley, Idler, Flat                  |
| 12         | 73750800    | Nutlock 1/2-20 Unf            | 51         | 73800600               | Nut, Crownlock 3/8-16 UNC            |
| 13         | 139419      | Washer, Special               | 52         | 139123                 | Pulley, Idler, Grooved               |
| 14         | 138901      | Bushing                       | 53         | 207J                   | Washer, Hardened                     |
| 15         | 19131316    | Washer 13/32 x 13/16 x 16 Ga. | 54         | 161590                 | Clutch, Arm Assembly                 |
| 16         | 143012      | Set, Screw 1/4-28 x 3/4       | 55         | 105706X                | Bearing, Idler                       |
| 17         | 126909X     | Spring                        | 56         | 137153                 | V-Belt                               |
| 18         | 137104      | Lever, Brake                  | 57         | 141756                 | Bracket, Shift Rod, Hi-Lo            |
| 19         | 136926      | Cam, Brake Disc               | 59         | 122253X                | Shift Rod, Hi-Lo                     |
| 21         | 23260412    | Screw, Flat Head 1/4-28 x 3/4 | 60         | 122268X                | Spring Clip, Connecting Link         |
| 22         | 633A109     | Gearshift, Lever Assembly     | 61         | 137524                 | Pulley, Transaxle                    |
| 23         | 106932X     | Knob                          | 62         | 10040700               | Washer, Lock 7/16                    |
| 24         | 136925      | Support, Puck Brake           | 63         | 74760720               | Bolt, Fin Hex 7/16-14 x 1-1/4        |
| 25         | 136923      | Puck, Brake Top               | 64         | 154752                 | Shaft, Clutch/Brake Pedal            |
| 26         | 137552      | Spring, Return                | 65         | 67609                  | Bolt, Shoulder                       |
| 27         | 17490528    | Screw, Hex Wsh Thd.           | 66         | 140296                 | Washer, Hardened                     |
|            |             | 5/16-18 x 1-3/4               | 67         | 19131312               | Washer, Flat                         |
| 28         | 73350600    | Nut, Hex Jam 3/8-16           | 68         | 5142H                  | Pin, Roll                            |
| 29         | 137213      | Brake, Rod                    | 69         | 136327                 | Hub, Cover                           |
| 30         | 19131616    | Washer 13/32 x 1 x 16 Ga.     | 117        | 73900600               | Nut, Lock Flg. 3/8-16 Unc            |
| 34         | 71673       | Cap, Plunger                  | NOT        | <b>.</b> All agrees as | ant dimensions sires in H.C. in the  |
| 35         | 137648      | Rod, Parking Brake            | NOT        |                        | nent dimensions given in U.S. inches |
| 36         | 149412      | Spring, Drive Ground          |            | 1 inch = 2             | 5.4 (1)(1)                           |

### TRACTOR - - MODEL NUMBER PRGT2046A

#### STEERING ASSEMBLY



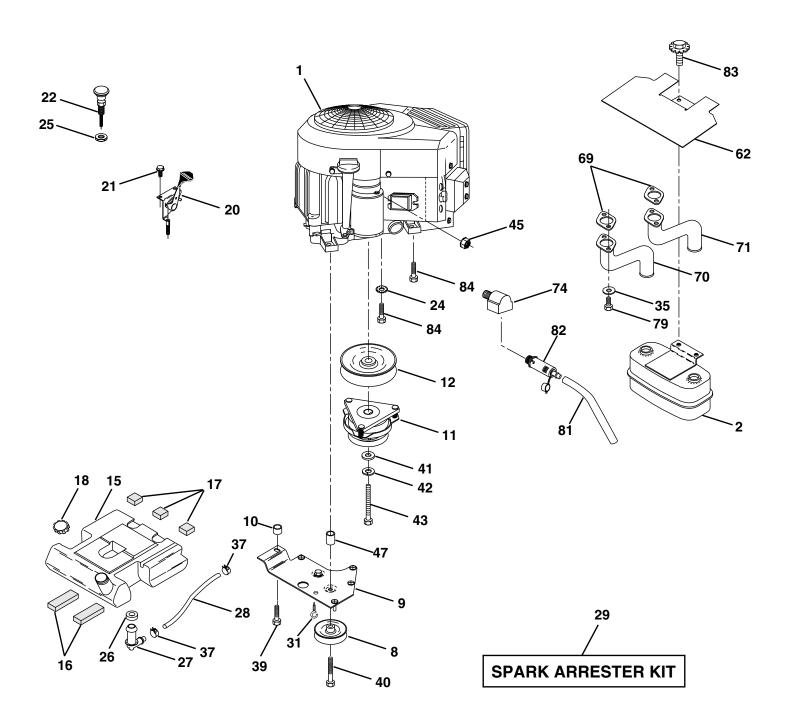
### TRACTOR - - MODEL NUMBER PRGT2046A

### STEERING ASSEMBLY

| KEY<br>NO. | PART<br>NO.         | DESCRIPTION   |
|------------|---------------------|---|
| 1          | 159944X428          | Wheel, Steering   |
| 2          | 137094              | Axle Asm., Front  |
| 3          | 6855M               | Fitting, Grease   |
| 4<br>5     | 161849              | Spindle Asm, LH   |
| 5<br>6     | 161848<br>6266H     | Spindle Asm., RH<br>Bearing, Race Thrust Harden           |
| 7          | 121748X             | Washer 25/32 x 1-5/8 x 16 Ga.                             |
| 8          | 12000029            | Ring, Klip #T5304-75                                      |
| 9          | 121232X             | Cap, Spindle  |
| 10         | 74781044            | Bolt, Fin Hex 5/8-11 x 2-3/4                              |
| 11         | 136518              | Spacer, Brg. Axle Front                                   |
| 12         | 73901000            | Nut, Lock Flange 5/8-11 Unc                               |
| 13         | 121749X             | Washer 25/32 x 1-1/4 x 16 Ga.                             |
| 14         | 10040600            | Washer, Lock Hvy Hlcl Spr 3/8                             |
| 15         | 7810H               | Nut Lock Center 3/8-24 Unf                                |
| 16<br>17   | 145103<br>137347    | Shaft Asm., Steering<br>Rod Tie Service                   |
| 18         | 137155              | Draglink, Ball Joint Solid Vgt                            |
| 19         | 156011              | Support Asm., Steering Vgt                                |
| 20         | 163887X428          | Boot Steering Stealth GTYT                                |
| 21         | 159945              | Adapter, Wheel Steering                                   |
| 22         | 155105              | Bushing, Strg.  |
| 23         | 152927              | Screw   |
| 25         | 74780616            | Bolt, Fin Hex 3/8-16 x 1 Gr. 5                            |
| 26         | 159946X428          | Insert Cap Strg WH  |
| 27         | 3366R               | Bearing, Col. Strg.                                       |
| 28<br>29   | 17000612<br>104239X | Screw Hexwsh thdr 3/8-16 x 3/4<br>Bearing, Flange         |
| 31         | 138136              | Bushing, Nyliner Snap                                     |
| 32         | 19111610            | Washer 11/32 x 1 x 10 Ga.                                 |
| 33         | 10040500            | Washer, Lock Hvy Hlcl Spr 5/16                            |
| 34         | 74780512            | Bolt, Hex Hd 5/16-18 x 3/4                                |
| 35         | 138059              | Gear, Sector Steering                                     |
| 36         | 137156              | Tie Rod   |
| 37         | 73360600            | Jam Nut RH Thread   |
| 38         | 109850X             | Joint Asm. Ball RH Thread                                 |
| 39<br>40   | 73700600            | Nut Hex Jam 3/8-24 LH Thread<br>Joint Asm. Ball LH Thread |
| 40<br>41   | 109851X<br>155246   | Bracket Switch Interlock Vgt 97                           |
| 42         | 17490508            | Screw Thdrol 5/16-18 x 1/2 Tyt                            |
| 44         | 160135X428          | Extension Steering  |
| 45         | 19132411            | Washer 13/32 x 1-1/2 x 11 Ga.                             |

## TRACTOR - - MODEL NUMBER PRGT2046A

### **ENGINE**



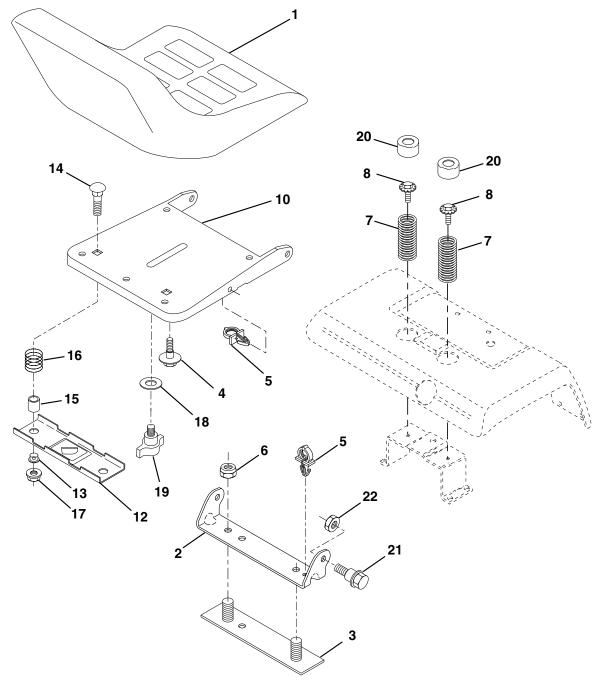
### TRACTOR - - MODEL NUMBER PRGT2046A

### **ENGINE**

| KEY<br>NO.           | PART<br>NO.      | DESCRIPTION                                       |
|----------------------|------------------|---|
| 1                    |                  | Engine Briggs Model # 407777                      |
| 2                    | 149723           | Muffler   |
| 8                    | 121361X          | Pulley V-Idler                                    |
| 9                    | 150828           | Keeper Asm Belt Engine Vgt 96                     |
| 10                   | 175287           | Bushing   |
| 11                   | 170056           | Clutch Electric                                   |
| 12                   | 143996           | Pulley Engine Grnd Drive                          |
| 15                   | 151346           | Tank Fuel Rear 3.50 YT/GT                         |
| 16                   | 109227X          | Pad Spacer  |
| 17                   | 106082X          | Pad Spacer  |
| 18                   | 140527           | Cap Asm Fuel Top Vent N/Lany                      |
| 20<br>21             | 164067<br>164863 | Control Throttle<br>Screw HWHD Hi-Lo #13-16 x 3/4 |
| 22                   | 164068           | Control Choke                                     |
| 22<br>24             | 11050600         | Lockwasher Ext Tooth 3/8                          |
| 25                   | 73920600         | Nut Keps 3/8-24 UNF                               |
| 26                   | 3645J            | Bushing   |
| 27                   | 139277           | Stem Tank Fuel                                    |
| 28                   | 7834R            | Fuel Line   |
| 29                   | 137180           | Spark Arrester Kit                                |
| 35                   | 10040500         | Washer Lock Hvy HLCL Spr. 5/16                    |
| 37                   | 123487X          | Clamp Hose  |
| 39                   | 17490636         | Screw 3/8 - 16 x 2-1/4 UNC TT                     |
| 40                   | 17490664         | Screw 3/8 - 16 x 4 UNC TT                         |
| 41                   | 126197X          | Washer 1-1/2 OD X 15/32 ID X .250                 |
| 42                   | 10040700         | Washer Lock 7/16                                  |
| 43                   | 173937           | Bolt Hex 7/16-20 x 4 Gr. 5-1.5 Thr.               |
| 45                   | 73510400         | Nut Keps Hex 1/4-20 Unc                           |
| 47                   | 175288           | Bushing   |
| 62                   | 146629           | Shield Heat Muffler                               |
| 69<br>70             | 165391           | Gasket Muffler                                    |
| 70<br>71             | 176069<br>176070 | Tube Exhaust LH<br>Tube Exhaust RH                |
| 71<br>74             | 162295           | Elbow Street Brass                                |
| 7 <del>4</del><br>79 | 71070512         | Screw Hex Hd Cap 5/16-18 x 3/4                    |
| 81                   | 148456           | Tube Drain Oil Easy                               |
| 82                   | 148315           | Plug Oil Drain Easy                               |
| 83                   | 171877           | Bolt 5/16-18 Unc x 3/4 w/Sems                     |
| 84                   | 17490624         | Screw Thdrol 3/8-16 x 1-1/2                       |
|                      |                  |   |

# **TRACTOR - - MODEL NUMBER PRGT2046A**

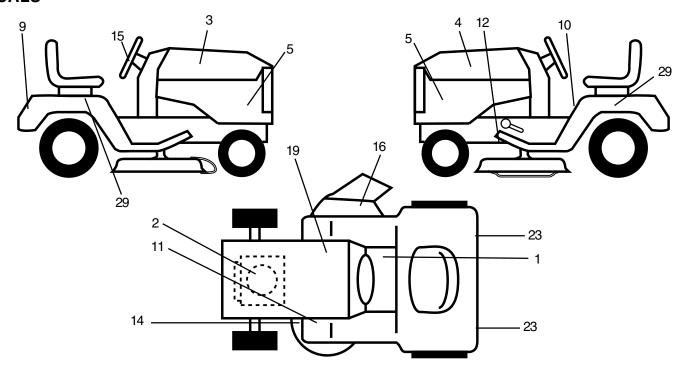
## **SEAT ASSEMBLY**



| KEY PART KEY NO. NO. DESCRIPTION NO.  | PART<br>NO. DESCRIPTION   |
|---|---|
| 1       171684       Seat       14         2       140551       Bracket, Pivot Seat       15         3       140675       Strap, Fender Asm.       16         4       127018X       Bolt, Shoulder 5/16-18 x .62       17         5       145006       Clip, Push-In Hinged       18         6       73800600       Nut, Lock Hex w/Ins. 3/8-16 Unc       19         7       124181X       Spring, Seat Cprsn.       20         8       171877       Bolt 5/16-18 UNC x 3/4 w/Sems       21         10       174894       Pan, Seat       22         12       121246X       Bracket, Mounting Switch       NO         13       121248X       Bushing, Snap       NO | 72050412 Bolt, Carriage 1/4-20 x 1-1/2 121249X Spacer, Split 123740X Spring, Cprsn. 123976X Nut, Lock 1/4 Lg. Flg. Gr. 5 19171912 Washer 17/32 x 1-3/16 x 12 Ga. 166369 Knob, Seat 124238X Cap, Spring Seat Blk 171852 Bolt 5/16-18 Unc-2A 73800500 Nut, Crownlock 5/16-18  E: All component dimensions given in U.S. inches 1 inch = 25.4 mm |

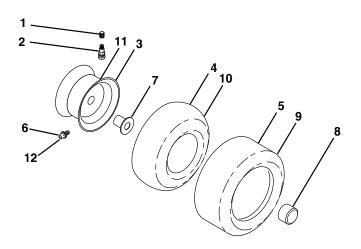
### TRACTOR - - MODEL NUMBER PRGT2046A

### **DECALS**



| KEY<br>NO. | PART<br>NO. | DESCRIPTION             | KEY<br>NO. | PART<br>NO. | DESCRIPTION                      |
|------------|-------------|-------------------------|------------|-------------|----------------------------------|
| 1          | 176674      | Decal, Dash             | 16         | 170563      | Decal, Housing Mower, Warning    |
| 2          | 170851      | Decal, Engine           | 19         | 145005      | Decal, Battery                   |
| 3          | 176272      | Decal, Hood, RH         | 23         | 106202X     | Reflector, Taillight             |
| 4          | 176273      | Decal, Hood, LH         | 29         | 176650      | Decal, Fender                    |
| 5          | 176652      | Decal, Hood Side PNL    | 30         | 172272      | Decal, Replacement Parts         |
| 9          | 172740      | Decal, Fender           |            | 138311      | Decal, Handle Lift (Lift Handle) |
| 10         | 157140      | Decal, Danger           |            | 133671      | Pad Footrest                     |
| 11         | 101892X     | Decal, Clutch/Brake     |            | 177271      | Manual, Owner's (English)        |
| 14         | 160397      | Decal, V-Belt Schematic |            | 177272      | Manual, Owner's (French)         |
| 15         | 172743      | Decal. Ins. Whl. Strg.  |            |             | ,                                |

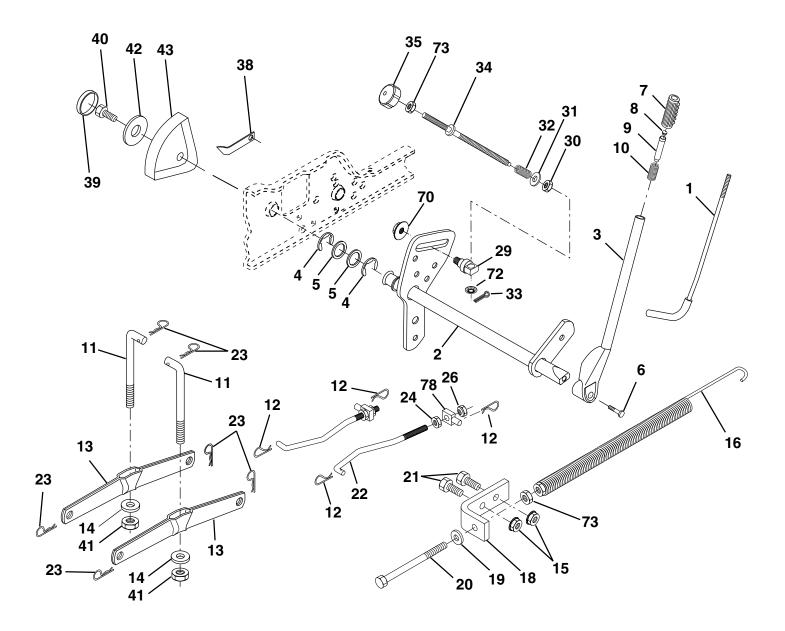
### **WHEELS & TIRES**



| KEY | PART       |                                    |
|-----|------------|------------------------------------|
| NO. | NO.        | DESCRIPTION                        |
| 1   | 59192      | Cap, Valve, Tire                   |
| 2   | 65139      | Stem, Valve                        |
| 3   | 106228X427 | Rim Assembly, Front                |
| 4   | 8134H      | Tube, Front (Service Item Only)    |
| 5   | 106230X    | Tire, Front                        |
| 6   | 278H       | Fitting, Grease (Front Wheel nly)  |
| 7   | 9040H      | Bearing, Flange (Front Wheel Only) |
| 8   | 104757X    | Cap, Axle (Front Wheel Only)       |
| 9   | 105588X    | Tire, Rear                         |
| 10  | 7154J      | Tube, Rear (Service Item Only)     |
| 11  | 106277X427 | Rim Assembly, Rear                 |
| 12  | 6856M      | Fitting, Grease                    |
|     | 144334     | Sealant, Tire (10 oz. Tube)        |

### TRACTOR - - MODEL NUMBER PRGT2046A

### LIFT ASSEMBLY

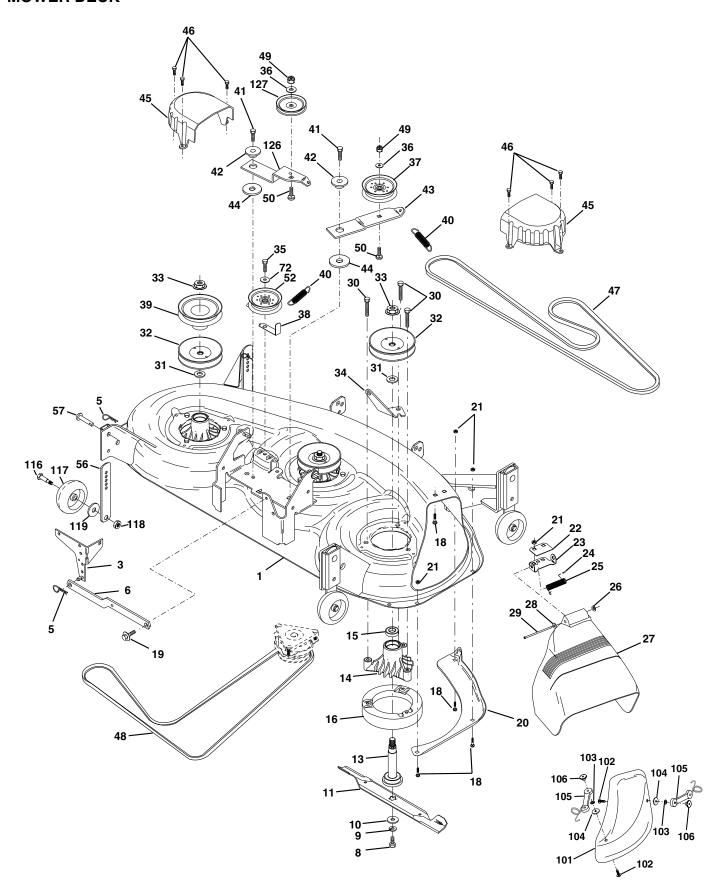


## TRACTOR - - MODEL NUMBER PRGT2046A

### LIFT ASSEMBLY

# **TRACTOR - - MODEL NUMBER PRGT2046A**

### **MOWER DECK**



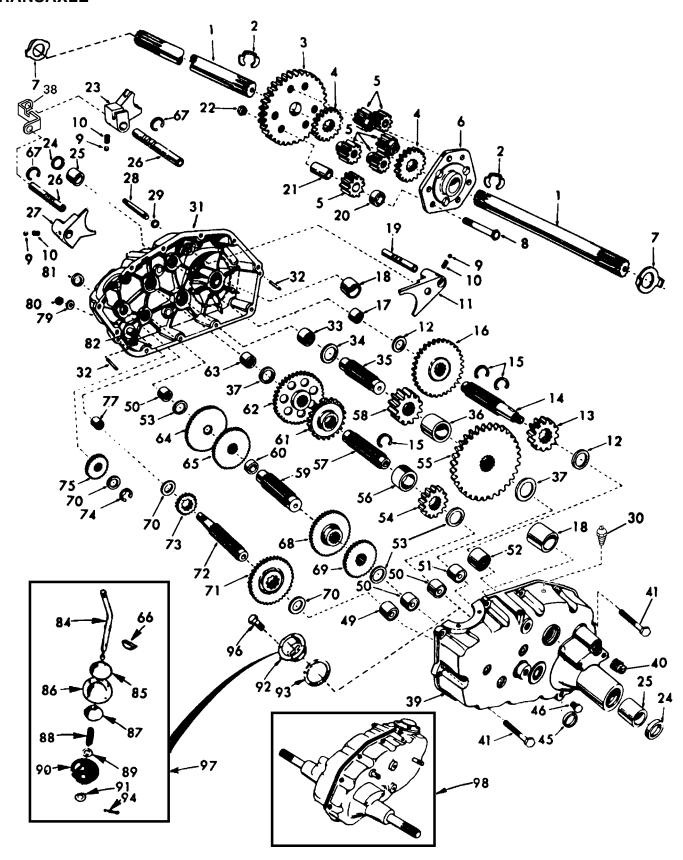
### TRACTOR - - MODEL NUMBER PRGT2046A

### **MOWER DECK**

| KEY<br>NO.  | PART<br>NO.               | DESCRIPTION   | KEY<br>NO. | PART<br>NO.                  | DESCRIPTION   |
|-------------|---------------------------|---|------------|------------------------------|---|
| 1<br>2<br>5 | 156833<br>138457<br>4939M | Deck Weldment Bracket Asm., Sway Bar                | 39<br>40   | 173899<br>137273<br>17060620 | Pulley, Idler, Driven Spring, Secondary 44/46/50 Vent |
| 5<br>6      | 130832                    | Retainer Spring<br>Arm, Suspension, Rear (Sway Bar) | 41<br>42   | 122052X                      | Screw, 3/8-16 x 1-1/4 Tytt<br>Spacer, Retainer        |
| 8           | 850857                    | Bolt, Patched 3/8-24 x 1-1/4 Gr. 8                  | 43         | 144949                       | Arm, Idler Secondary                                  |
| 9           | 10030600                  | Washer, Lock Hvy., Unplated 3/8                     | 44         | 133943                       | Washer, Hardened                                      |
| 10          | 140296                    | Washer, Hard Blade, Mower Vented                    | 45         | 145059                       | Cover, Mandrel Deck                                   |
| 11          | 176084                    | Blade, Hi Performance                               | 46         | 137729                       | Screw, Thdroll. 1/4-20 x 5/8                          |
|             | 152443                    | Blade, Mulching                                     | 47         | 144959                       | V-Belt, Mower, Secondary                              |
| 13          | 137553                    | Shaft Asm. w/Lower Bearing                          | 48         | 148763                       | V-Belt, Mower, Primary                                |
|             |                           | (Includes Key No. 12)                               | 49         | 73680600                     | Nut, Crownlock 3/8-16 UNC                             |
| 14          | 137152                    | Housing, Mandrel                                    | 50         | 72110612                     | Bolt, Carriage 3/8-16 x 1-1/2 Gr. 5                   |
| 15          | 110485X                   | Bearing, Ball, Mandrel                              | 52         | 173901                       | Pulley Idler 46 Pri Drive                             |
| 16          | 140329                    | Stripper, Mower Round                               | 56         | 155986                       | Bar Adjusting Guage Wheel                             |
| 18          | 72140505                  | Bolt, Carriage 5/16-18 x 5/8                        | 57         | 156941                       | Pin Head Rivet  |
| 19          | 132827                    | Bolt, Hex Head, Shoulder 5/16-18                    | 72         | 19131616                     | Washer 13/32 x 1 x 16 Ga.                             |
| 20          | 145055                    | Baffle, Vortex Mower 46"                            | 101        | 145579                       | Cover Mulcher   |
| 21<br>22    | 73680500                  | Nut, Crownlock 5/16-18 UNC                          | 102<br>103 | 71081010<br>70071000         | Screw Pan Head Phillip 10-24 x 5/8                    |
| 22<br>23    | 134753X421<br>131267      | Stiffiner, Bracket<br>Bracket, Deflector            | 103        | 19061216                     | Washer Lock #10<br>Washer #10                         |
| 23<br>24    | 105304X                   | Cap, Sleeve   | 105        | 160793                       | Latch Asm Mulch/Bagger                                |
| 25          | 149287                    | Spring, Torsion, Deflector                          | 103        | 2029J                        | Nut Weld  |
| 26          | 110452X                   | Nut, Push   | 116        | 137644                       | Bolt, Shoulder  |
| 27          | 166883X428                |   | 117        | 133957                       | Gauge Wheel, Wide                                     |
| 28          | 19111016                  | Washer 11/32 x 5/8 x 16 Ga.                         | 118        | 73930600                     | Nut, Centerlock 3/8-16 UNC                            |
| 29          | 131491                    | Rod, Hinge  | 119        | 19121414                     | Washer 3/8 x 7/8 x 14 Ga.                             |
| 30          | 157722                    | Screw, Thdroll Wsh Hd                               | 126        | 144948                       | Arm, Idler, Primary Deck 46"                          |
| 31          | 129963                    | Washer, Spacer Mower Vented                         | 127        | 173902                       | Pulley Idler V-Gr. Plated 4.25                        |
| 32          | 173434                    | Pulley, Mandrel                                     |            | 173559                       | Deck Complete (Std. Deck-Order                        |
| 33          | 137266                    | Nut, Flg. Top Lock Cntr. 9/16                       |            |                              | separately mulcher plate and gauge                    |
| 34          | 144945                    | Anchor, Spring Deck 46"                             |            |                              | wheel components Key Nos. 101-106                     |
| 35          | 17490628                  | Screw, Thdroll 3/8-16 x 1-3/4 Tytt                  |            | 4.40054                      | and 116-118)  |
| 36          | 19131316                  | Washer 13/32 x 13/16 x 16 Ga.                       |            | 143651                       | Mandrel Asm. 44"/50" service                          |
| 37          | 173438                    | Pulley, Idler, Flat                                 |            |                              | (Includes Key Nos. 8-10, 13-15, 31                    |
| 38          | 173900                    | Keeper, Belt, Idler                                 |            |                              | and 33)   |

### TRACTOR - - MODEL NUMBER PRGT2046A

### **TRANSAXLE**



## TRACTOR - - MODEL NUMBER PRGT2046A

### **TRANSAXLE**

| KEY<br>NO. | PART<br>NO.      | DESCRIPTION                                       | KEY<br>NO.           | PART<br>NO.       | DESCRIPTION                              |
|------------|------------------|---|----------------------|-------------------|--|
| 1          | 4197R            | Axle Shaft  | 52                   | 8119M             | Needle Bearing                           |
| 2          | 12000034         | Retaining Ring                                    | 53                   | 4220R             | Thrust Bearing Race                      |
| 3          | 4199R            | Final Drive Gear                                  | 54                   | 4209R             | 3rd Reduction Pinion, Low                |
| 4          | 4216R            | Differential Gear                                 | 55                   | 4213R             | 4th Reduction Gear                       |
| 5          | 4215R            | Differential Pinion                               | 56                   | 4442R             | 3rd Reduction Pinion Spacer              |
| 6          | 4217R            | Differential Carrier                              | 57                   | 4195R             | 2nd Reduction Gear Shaft                 |
| 7          | 174728           | Axle Thrust Washer                                | 58                   | 4214R             | Final Drive Pinion                       |
| 8          | 74020652         | Bolt, Hex Head 3/8-24 x 3-1/4                     | 59                   | 4194R             | 1st Reduction Gear Shaft                 |
| _          | 700014           | (1"Thread Length)                                 | 60                   | 7528R             | 1st Reduction Shaft Spacer               |
| 9          | 7392M            | Steel Ball  | 61<br>62             | 4208R             | 3rd Reduction Plnion High                |
| 10<br>11   | 137261<br>4985R  | Spring Shift Fork Detent                          | 63                   | 4207R<br>7398H    | 2nd Reduction Gear<br>Needle Bearing     |
| 12         | 6266H            | Shift Fork, High-Low Range<br>Thrust Bearing Race | 64                   | 4203R             | Low Speed Gear and 2nd                   |
| 13         | 4212R            | 4th Reduction Pinion                              | 04                   | 420011            | Reduction Pinion Cluster                 |
| 14         | 137125           | Shaft, Brake                                      | 65                   | 4204R             | Reverse Gear                             |
| 15         | 6276H            | Snap Ring, Crescent Type                          | 66                   | 2898J             | Key, Hi-Pro 1/8 x 17/32                  |
| 16         | 633A63           | High-Low Range Gears                              | 67                   | 12000033          | Klip Ring                                |
| 17         | 8118M            | Needle Bearing                                    | 68                   | 4205R             | Intermediate Speed Gear                  |
| 18         | 8740H1           | Sintered Iron Bearing                             | 69                   | 4206R             | High Speed Gear                          |
| 19         | 122238X          | Shift Fork Shaft, High-Low Range                  | 70                   | 1370H             | Thrust Bearing Race                      |
| 20         | 4218R            | Differential Pinion Spacer                        | 71                   | 633A69            | Intermediate and High Speed              |
| 21         | 6252H1           | Differential Pinion Bushing                       |                      |                   | Cluster Pinions                          |
| 22         | 7810H            | Gripco Centerlock Nut 3/8-24                      | 72                   | 139120            | Input Shaft                              |
| 23         | 6262H            | Shift Fork, R.H.                                  | 73                   | 4201R             | Low Speed Pinion                         |
| 24         | 7393R            | Oil Seal  | 74                   | 12000008          | E-Ring                                   |
| 25         | 992R1            | Sintered Iron Bearing                             | 75<br>77             | 1153R             | Reverse Idler Gear                       |
| 26<br>27   | 139111<br>4986R  | Shift Fork Shaft                                  | 77<br>79             | 6803J<br>1167R    | Needle Bearing                           |
| 28         | 122254X          | Shift Fork, L.H.<br>Shift Shaft, High-Low Range   | 80                   | 73360700          | Sealing Washer<br>Nut, Hex, Jam 7/16-20  |
| 29         | 6269H            | Oil Seal  | 81                   | 6270H             | Oil Seal                                 |
| 30         | 5855H            | Pressure Relief Valve                             | 82                   | 136984            | Reverse Idler Shaft                      |
| 31         | 174731           | Gearcase, Reverse Idler Shaft                     | 84                   | 5384J             | Gearshift Lever, Bent                    |
| -          |                  | and Bearings, R.H. (Includes Key                  | 85                   | 2978J             | Gearshift Cap                            |
|            |                  | No.'s 17,18, 25, 33, 50, 3, 77 and                | 86                   | 633A85            | Gearshift Ball Cover and Pin             |
|            |                  | 82)   | 87                   | 8739H1            | Shift Lever Guide Ball, Keyed            |
| 32         | 6277H            | Dowel Pin   | 88                   | 4924H             | Spring                                   |
| 33         | 4225R            | Needle Bearing                                    | 89                   | 19151516          | Washer 15/32 x 15/16 x 16 Ga.            |
| 34         | 7396H            | Thrust Bearing Race                               | 90                   | 110542X           | Shift Mechanism Seal                     |
| 35         | 4198R            | 4th Reduction Gear Shaft                          | 91                   | 19181511          | Washer 9/16 x 15/16 x 12 Gauge           |
| 36         | 4200R            | 4th Reduction Gear Spacer                         | 92                   | 75J               | Gearshift Gate and                       |
| 37         | 7395H            | Thrust Bearing Race                               | വാ                   | 6074LI            | Reinforcement<br>Shift Ball Cover Gasket |
| 38<br>39   | 160789<br>174729 | Gate, Lower, Shift<br>Gearcase and Bearings, L.H. | 93<br>94             | 6274H<br>76020412 | Cotter Pin 1/8 x 3/4                     |
| 39         | 174729           | (Includes Key Numbers 18, 25,                     | 9 <del>4</del><br>96 | 159783            | Screw, Hex, Washer, HD.                  |
|            |                  | 49, 50 (2), 51 and 52)                            | 97                   | 633A109           | Gearshift Lever Assembly                 |
| 40         | 13320400         | Pipe Plug 1/2-14 N.P.T.                           | 98                   | 174742            | Transaxle, 6 Speed,                      |
| 41         | 17580520         | Bolt, Hex 5/16-18 UNC x 1-1/4                     | 00                   | 17 17 12          | Complete Assembly                        |
| 45         | 6271H            | Oil Seal  | NOT                  | E: All component  | dimensions given in U.S. inches          |
| 46         | 13060200         | Pipe Plug 1/4-18 N.P.T.                           | - "-                 | 1 inch = 25.4     |  |
| 49         | 4895H            | Needle Bearing                                    |                      |                   |  |
| 50         | 4222R            | Needle Bearing                                    |                      |                   |  |
| 51         | 1529R            | Needle Bearing                                    |                      |                   |  |

### LIMITED WARRANTY

The Manufacturer warrants to the original consumer purchaser that this product as manufactured is free from defects in materials and workmanship. For a period of two (2) years from date of purchase by the original consumer purchaser, we will repair or replace, at our option, without charge for parts or labor incurred in replacing parts, any part which we find to be defective due to materials or workmanship. This Warranty is subject to the following limitations and exclusions.

- This warranty does not apply to the engine, other than EHP manufactured transaxle/transmission components, battery (except as noted below) or components parts thereof. Please refer to the applicable manufacturer's warranty on these items.
- Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by Electrolux Home Products.
- 3. Battery Warranty: On products equipped with a Battery, we will replace, without charge to you, any battery which we find to be defective in manufacture, during the first ninety (90) days of ownership. After ninety (90) days, we will exchange the Battery, charging you 1/12 of the price of a new Battery for each full month from the date of the original sale. Battery must be maintained in accordance with the instructions furnished.
- 4. The Warranty period for any products used for rental or commercial purposes is limited to 90 days from the date of original purchase.
- 5. This Warranty applies only to products which have been properly assembled, adjusted, operated, and maintained in accordance with the instructions furnished. This Warranty does not apply to any product which has been subjected to alteration, misuse, abuse, improper assembly or installation, delivery damage, or to normal wear of the product.
- 6. Exclusions: Excluded from this Warranty are belts, blades, blade adapters, normal wear, normal adjustments, standard hardware and normal maintenance.
- 7. In the event you have a claim under this Warranty, you must return the product to an authorized service dealer.

Should you have any unanswered questions concerning this Warranty, please contact:

Electrolux Home Products a division of WCI Outdoor Products, Inc. Outdoor Products Customer Service Dept. 250 Bobby Jones Expressway Augusta, GA 30909 USA In Canada contact:

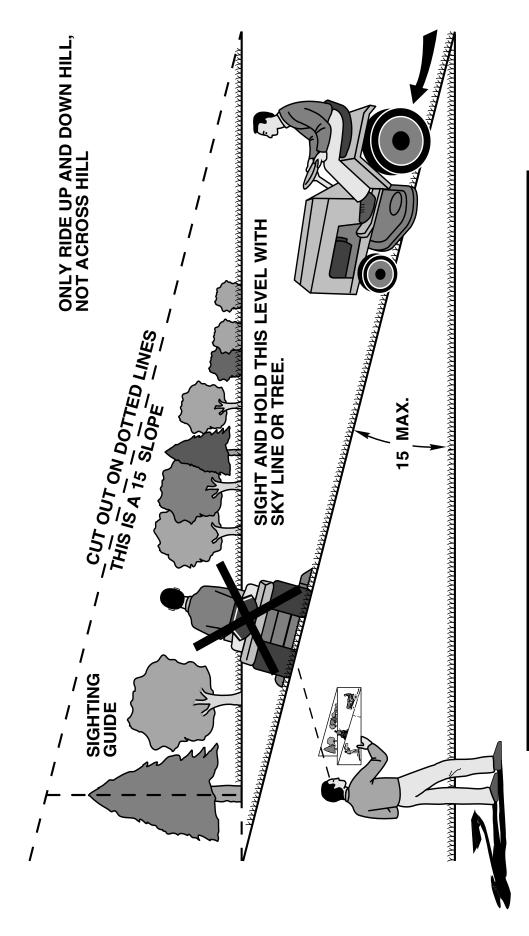
Electrolux Home Products
a division of WCI Outdoor Products, Inc.
7075 Ordan Drive
Mississauga, Ontario
L5T 1K6

giving the model number, serial number and date of purchase of your product and the name and address of the authorized dealer from whom it was purchased.

THIS WARRANTY DOES NOT APPLY TO INCIDENTAL OR CONSEQUENTIAL DAMAGES AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR OUR EXPRESSED WARRANTIES. Some areas do not allow the limitation of consequential damages or limitations of how long an implied Warranty may last, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from locale to locale.

This is a limited Warranty within the meaning of that term as defined in the Magnuson-Moss Act of 1975.

# SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



Operate your Tractor up and down the face of slopes (not greater than 15), never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

# PARTS AND SERVICE

Your POULAN PRO product has been expertly engineered and carefully manufactured to rigid quality standards. As with all mechanical products, some adjustments or part replacement may be necessary during the life of your unit.

### FOR SERVICE OR REPLACEMENT PARTS:

- 1. Consult your dealer/place of purchase.
- 2. Consult the yellow pages of your phone directory for the name of the nearest service dealer (under "saws" for Chain Saws or under "lawn mowers" for Trimmers, Brushcutters, and Blowers).
- 3. For replacement parts, have available the following information:
  - a. Model Number/Manufacturer's I.D. Number
  - b. Description of part.

NOTE: Electrolux Home Products provides parts and service through its authorized distributors and dealers; therefore, all requests for parts and service should be directed to your local dealer(s). The philosophy of Electrolux Home Products is to continually improve all of its products. If the operating characteristics or the appearance of your product differs from those described in this Manual, please contact your local dealer for updated information and assistance.